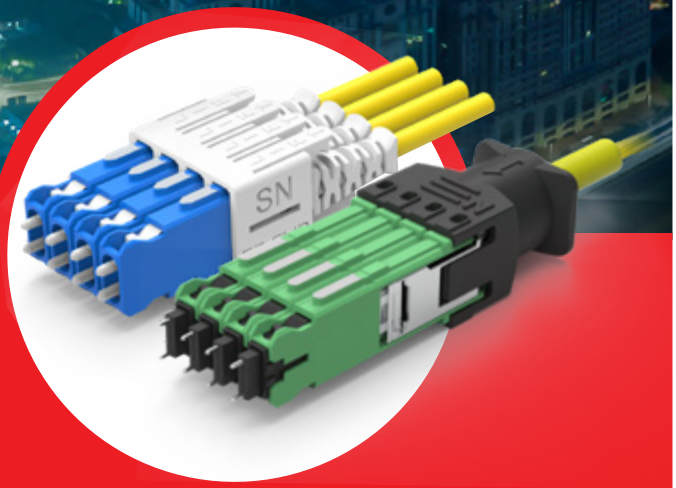
SENKO®
Advanced Components

SN® *and* SN®-MT
SIMPLIFIED NETWORKS
EDITION 1.2



senko.com

SN® AND SN®-MT SERIES

SENKO®
Advanced Components

Let go of the past.

Connect with the now.

SENKO®
Advanced Components

Innovative Optical Connectivity Solutions

SENKO Advanced Components design and manufacture precise, user-friendly, and application-focused fiber optic connectors that allow network operators to achieve the performance and reliability necessary to support the world's unquenchable demand for data. As you would expect from a Japanese company, precision is paramount to our offering, and we take pride in providing the global communications market with reliable and repeatable components that guarantee business-critical, error-free transmission.

We understand the challenges that network operators face in building networks that are not just quick and easy to construct, but also easy to manage and maintain over the complete life-cycle of the network. For this reason, SENKO pays special attention in developing connectors that are easy to identify and access even in when placed in the densest and demanding of applications. The world demands high-performance connectivity "*always and everywhere*". Our application-focused approach ensures that connectors are optimized for the environment whether it be inside a controlled data center, or high up on a remote antenna mast.

Resolving Industry Challenges

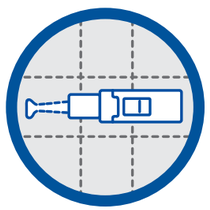
As markets continue to evolve, so do the requirements of fiber optic products. With over 30 years of experience and a highly skilled team of professionals, SENKO can resolve industry challenges quickly and effectively. With SENKO, the typical design and physical first prototyping takes weeks, not months. The majority of products are stocked and ready to be delivered in the same week. SENKO has fully embraced the idea that your success is our success.

Design

Working with our customers, SENKO helps define product application, functionality, and manufacturability

Prototype

SENKO has the capability to create in-house functional prototyping



Refine

SENKO continuously strives to enhance performance, reliability, usability, and cost

Validate

Products verified against established industry standards

Your success is our success

VSFF Pioneer and Technology Leader with 90+ Patents

SENKO connectivity is driving next-generation applications that consume unparalleled amounts of data. Super-computing, AI and Big Data are just a few of the applications that demand data rates as high as 400G, 800G, 1,6TB or beyond. Our VSFF (Very Small Form Factor) connectivity is the first of its kind to deliver twice as many optical channels within the standard footprint of legacy transceivers. Whatever your connector requirements or application, SENKO is here to help you. We value every connection.

VSFF
VERY SMALL FORM FACTOR

Patented Solutions

- SN®, SN®-MT, CS® are invented by SENKO Advanced Components and are standardized in the QSFP-DD MSA and OSFP-MSA specifications. The CS® currently a standardized connector in TIA as the TIA-604-19 and the SN® is in the process to standardization in IEC as the IEC 61754-36.
- SENKO is the global leader in VSFF connectivity, and our portfolio represents the broadest number of connectors, adapters and high-data-rate transceivers on the market.
- SENKO provides a licencing scheme to approved partners to manufacture SN®, SN®-MT and CS® connectors and adapters without the risk of direct/indirect patent infringement

90+
VSFF Patents Globally

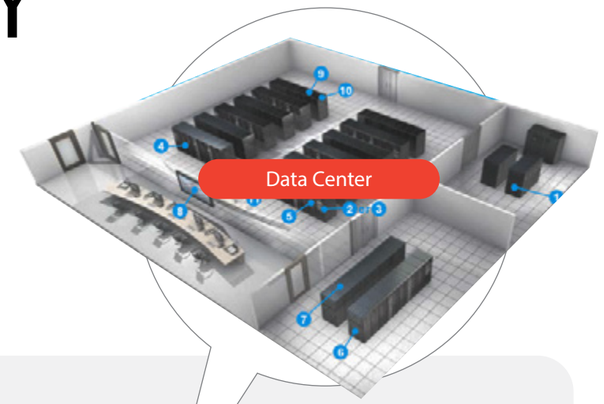
Global Presence

With offices all around the world, SENKO aims to provide local service on a Global footprint.

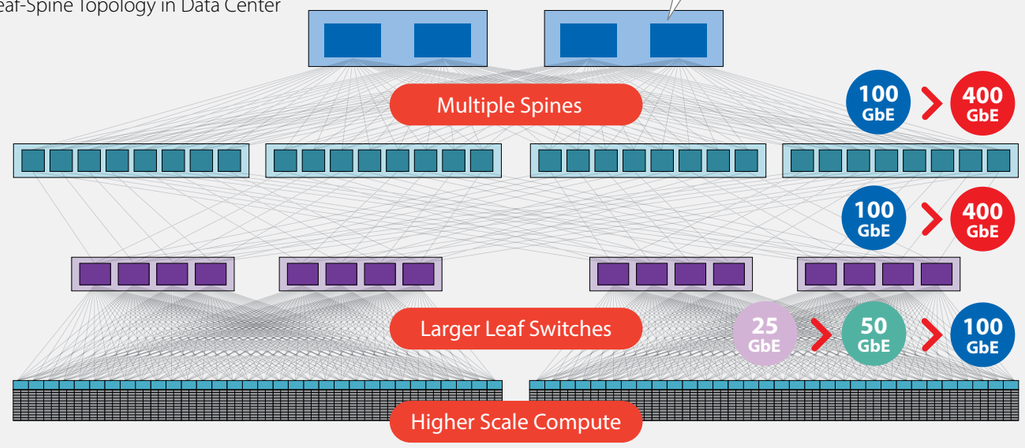
Hyperscale AVIATION
TELECOM **Data Centers**
WIRELESS INDUSTRIAL **Automotive** MEDICAL **and more...**

NETWORK CONGESTION DENSIFICATION COMPLEXITY

More and more fibers are required in Data Center applications. As the data traffic requirements and bandwidths grow, so does the need for new innovative interconnect solutions.



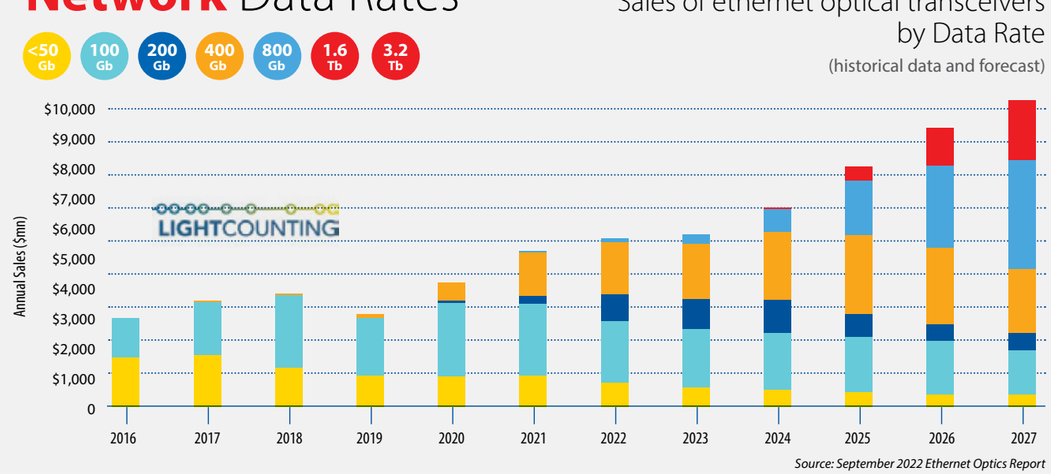
Distributed Data Center
Leaf-Spine Topology in Data Center



Market Trends

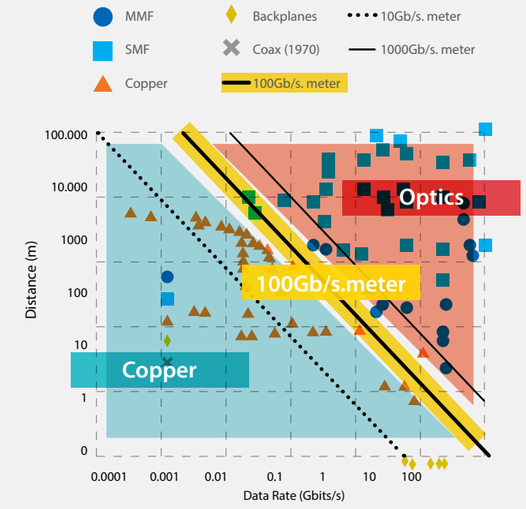
Network Data Rates

Sales of ethernet optical transceivers by Data Rate
(historical data and forecast)



Source: September 2022 Ethernet Optics Report

Copper vs. Optics



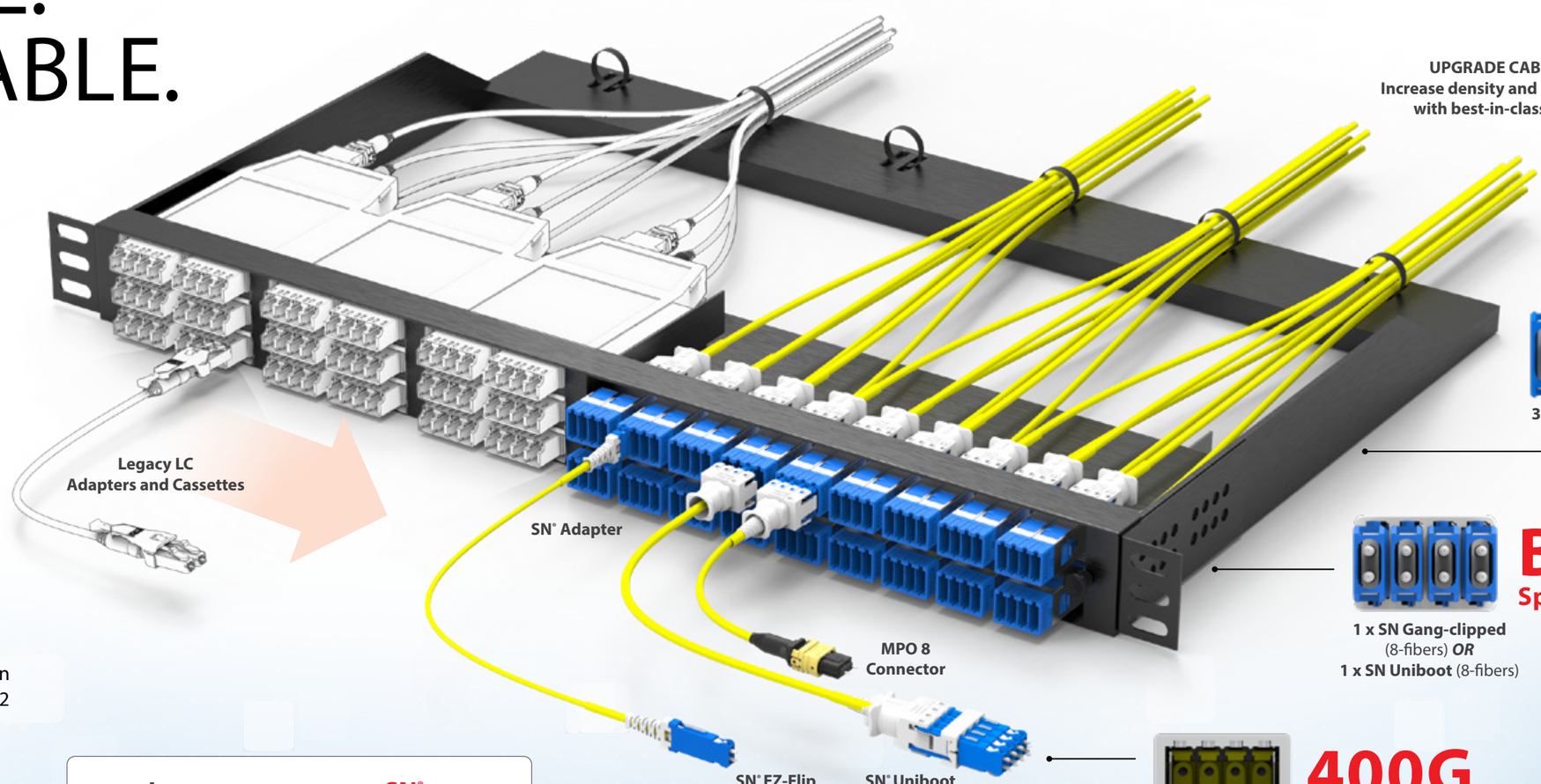
Network Drive Toward Sustainability

SIMPLE.
SCALABLE.
SUSTAINABLE.

Meet the SN® Family

SENKO®
Advanced Components

Let Go of the Past. Connect With the Now.



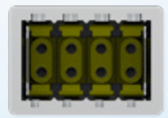
UPGRADE CABLE SYSTEMS
Increase density and improve reliability with best-in-class performance

3x Denser

3 x SN (6-fibers)

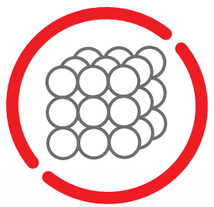
BASE-8
Speed & Flexiblity

1 x SN Gang-clipped (8-fibers) ***OR*** **1 x SN Uniboot** (8-fibers)



400G
Breakout Ready

1 x SN Gang-clipped (8-fibers) ***OR*** **1 x SN Uniboot** (8-fibers)



40% DENSER THAN LC

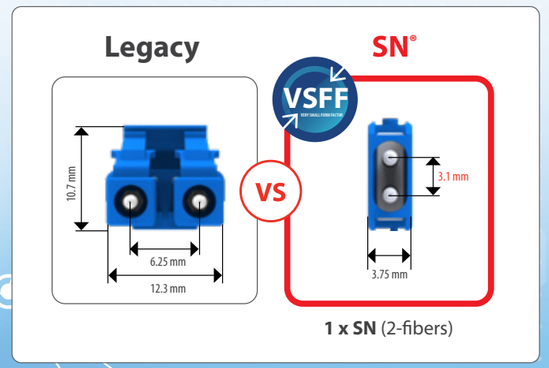
Reduce the number of patch panels and racks by optimizing available space

MORE FLEXIBLITY, LESS HARDWARE

SN® links require no cassettes to transition from Base-8 to Base-2

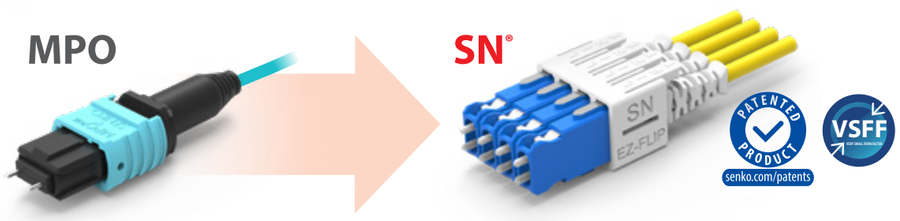
SCALABLE UP TO 1.6TB

Learn how SN® is used in the data center



1 x SN (2-fibers)

SN® - Simplified Networks



- Reduce connection points
- Shuffle or fanout is not required for cross connection
- More stable performance and easier maintenance

Simplified

Maintenance

SN® networks can be built with fewer mated pairs across the link. This equates to fewer connectors that need to be inspected, cleaned and mated.

Simplified

Transceiver shuffle

Up to 4 x SN® connectors can be plugged to a QSFP-DD or OSFP transceiver. These duplex connections can be broken out into four different transceivers without the need for transition cassettes or fan-outs.

Simplified

Installation

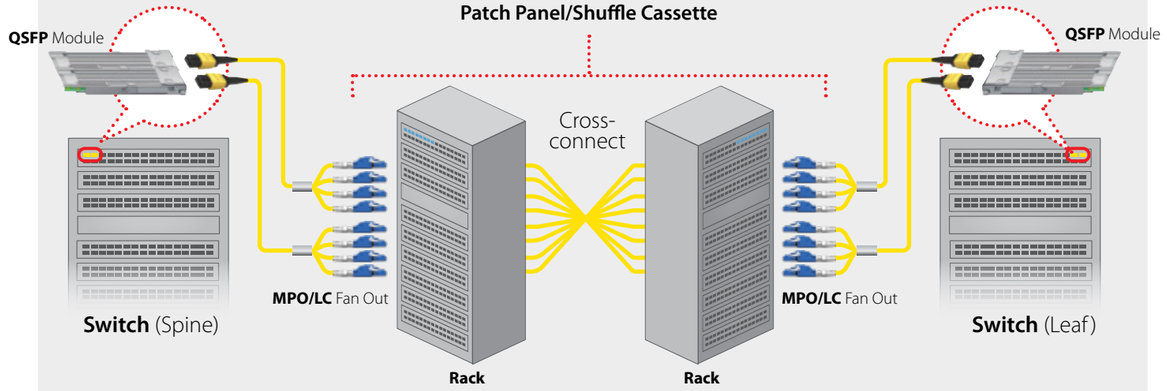
The pullable, flexible boot on the SN® connector means that access is always guaranteed to the connector even when stacked side by side in static patch panels.

Increase Efficiency with SN® Simplified Cabling

Learn about SN® VIDEO

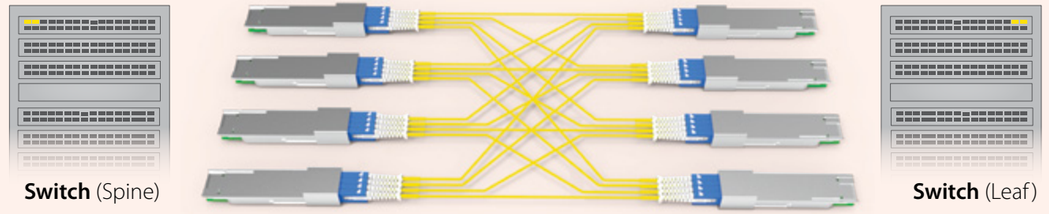
Click to Watch Videos

Leaf-Spine Cross Connection *Existing solution with MPO 8F based Transceiver*



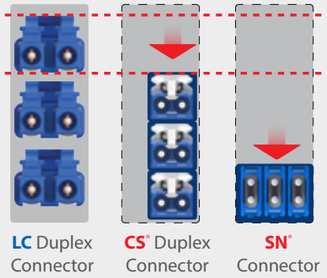
New solution with 4x SN® based Transceiver

Less connectivity points required
No fanout or breakout cables are required



HYPER DENSITY

SN® allows operators to increase the patch panel density by a factor of 3 versus legacy LC connectivity



LC Duplex Connector | **CS®** Duplex Connector | **SN®** Connector

+ Density

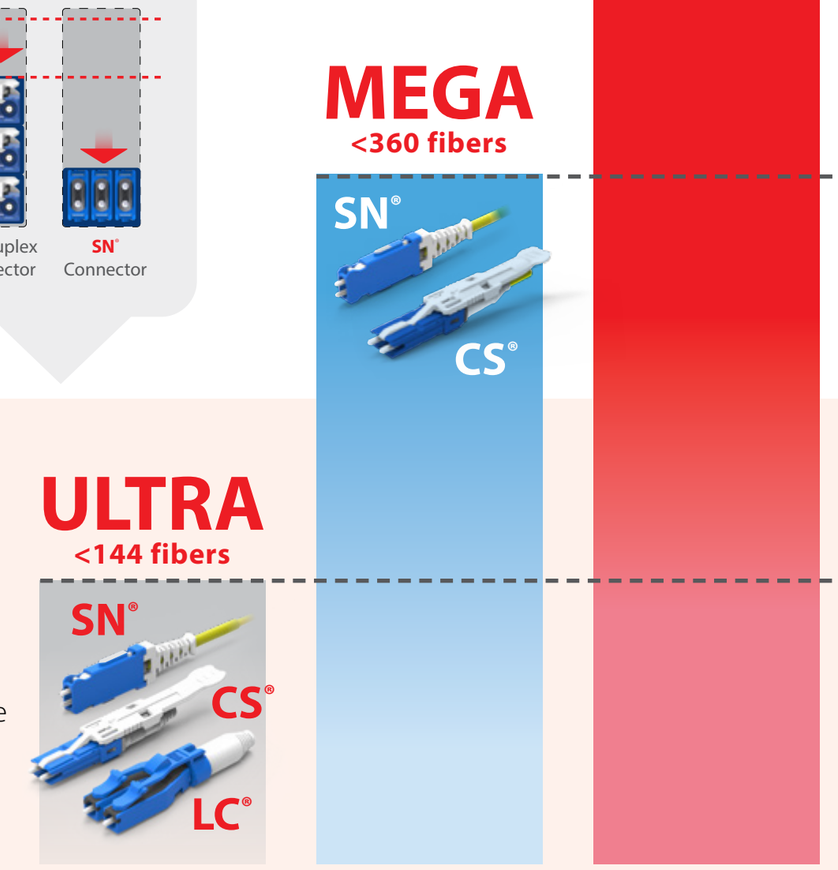
Improve port identification, connector access and cable management with SN®

Utilize Available Rack Space for Revenue-Generating Servers or Switches

HYPER
360 fibers+

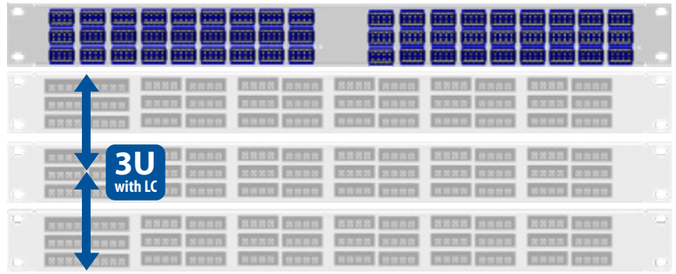
MEGA
<360 fibers

ULTRA
<144 fibers



HYPER Density

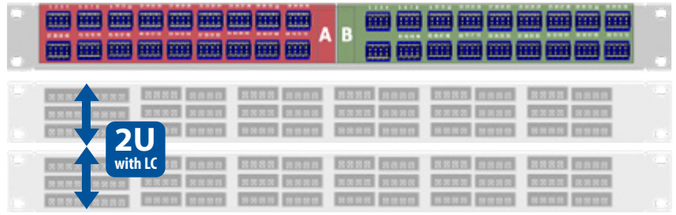
As much as 432 fibers per 1RU of rack space. Huge cost-per-port savings and significantly better rack utilization.



54 x SN®
Total Capacity
216 CH
432 F
(1RU single sided rack/ cabinet)

MEGA Density

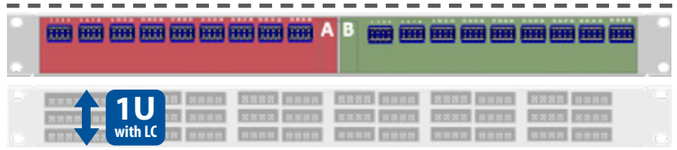
More than double the density of the current offering with LC connectivity. Significantly lower total cost per port.



36 x SN®
Total Capacity
144 CH
288 F
(1RU single sided rack/ cabinet)

ULTRA Density

Industry bench-mark density per 1RU using engineered chassis and cassette systems.



18 x SN®
Total Capacity
72 CH
144 F
(1RU single sided rack/ cabinet)

SENKO®
Advanced Components

What is the Industry Saying?

CABLING INNOVATORS AWARDS
PLATINUM HONOREE

2019 LIGHTWAVE INNOVATION REVIEWS

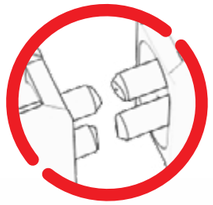
> "Wirewerks has a long-established, collaborative relationship with SENKO, and we were pleased when our meticulous evaluation of next generation fiber connector technologies pointed to SENKO's SN® product line."

Edouard Tabet, ***Vice President of Engineering***
WIREWERKS

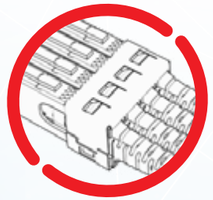
SN® CONNECTOR

SENKO Products are RoHS, Reach SVHC and UL 94 V-0 compliant.

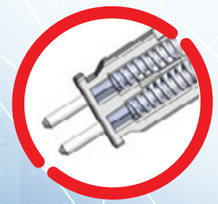
A ceramic-based fiber optic connector so compact and flexible that it can be utilized either as a Base-8 trunk solution, a Base-2 patching interface or as a Base-8 connection to next-generation 200G, 400G and 800G transceivers



APC OPTION AVAILABLE

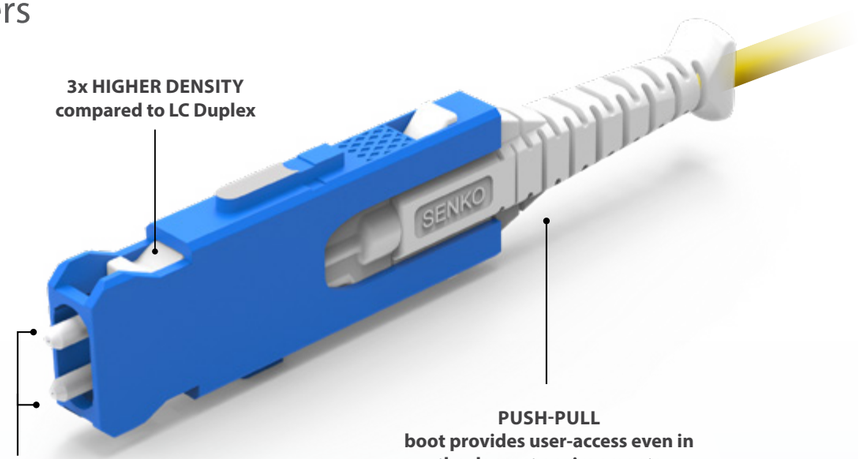


GANG CLIP COMPATIBLE

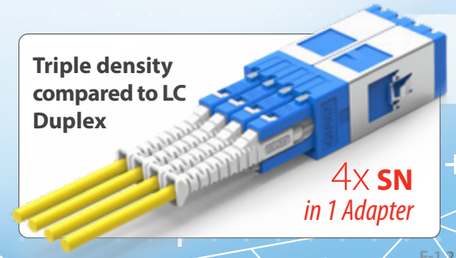


PRE-ASSEMBLED KIT

SWITCH POLARITY



- Most dense dual ferrule uniboot connector
- Mechanically stronger
- Allows better cable management/routing

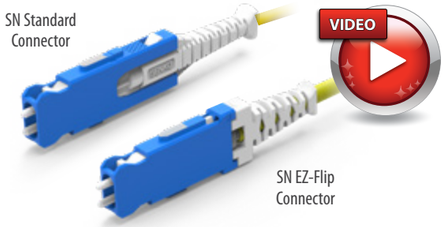


SENKO®
Advanced Components

SN® Connectors for Next-Generation Data Centers

SN® CONNECTOR

Standard duplex SN® connectors for patch cord assemblies and breakouts

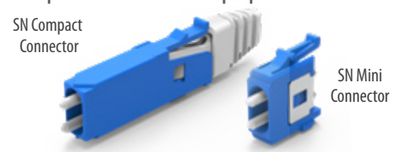


SN® JUNIOR CONNECTOR

Standard SN® connector for BTW (Behind The Wall) applications

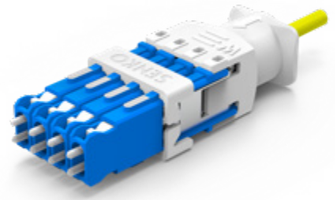
SN® COMPACT/MINI CONNECTOR
Space-Saving Applications

BTW connectors designed for cassettes and optoelectronic equipment



SN® UNIBOOT CONNECTOR

Base-8/Base-2 connector designed for high-density trunk applications



E-1.2

FEATURED BENEFITS

Turn down the heat

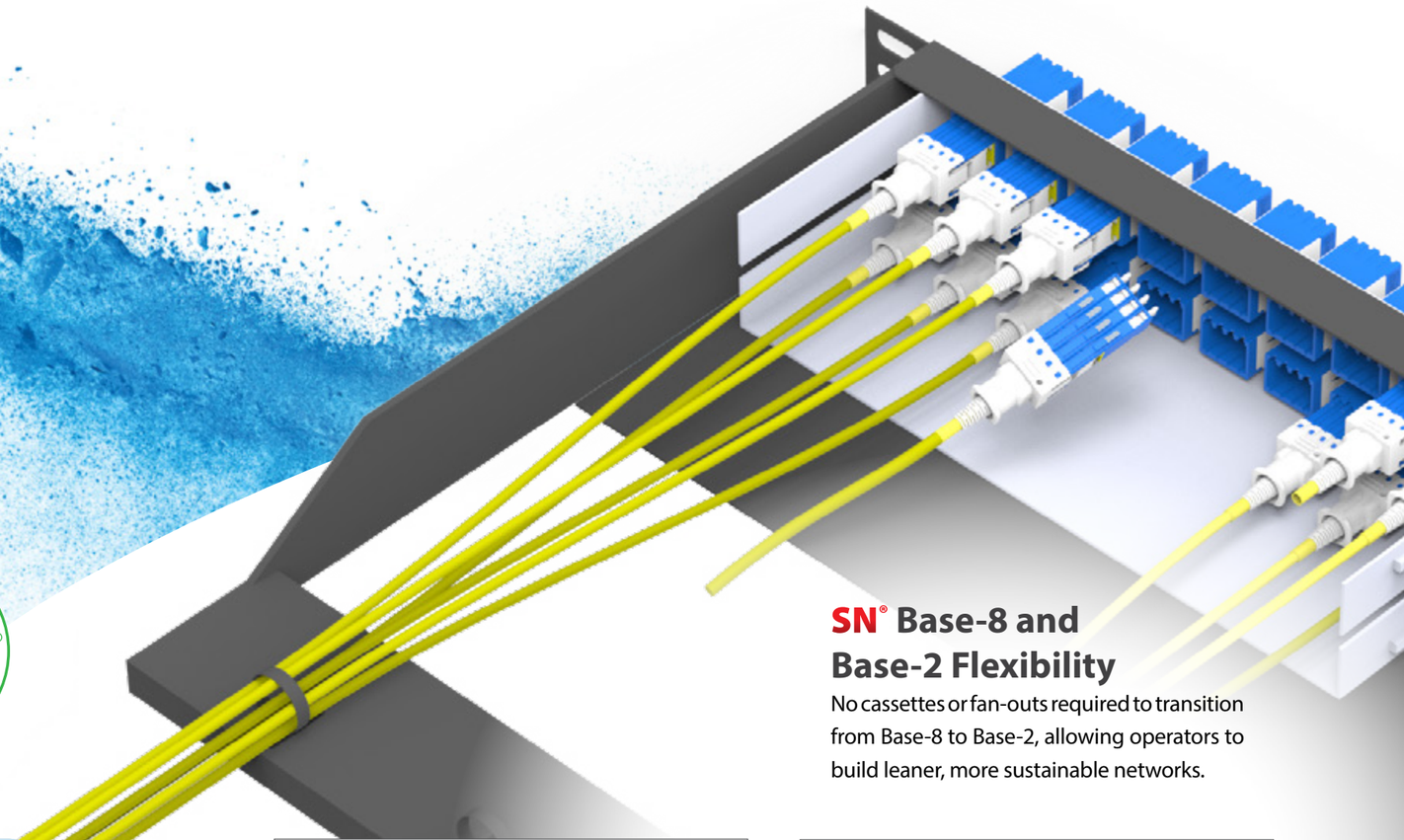
Improve air flow to equipment and reduce energy consumption with SN® and SN®-MT

SENKO® SUSTAINABILITY GREEN SEAL

SUSTAINABLE NETWORKS

Smaller Footprint

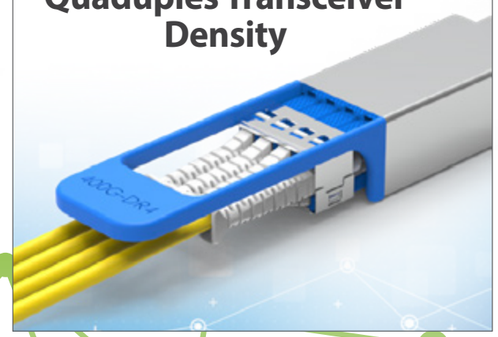
Increase capacity and reduce the need for additional data centers with SN® and SN®-MT connectors



SN® Base-8 and Base-2 Flexibility

No cassettes or fan-outs required to transition from Base-8 to Base-2, allowing operators to build leaner, more sustainable networks.

Quaduples Transceiver Density



Flex-Angle Boot

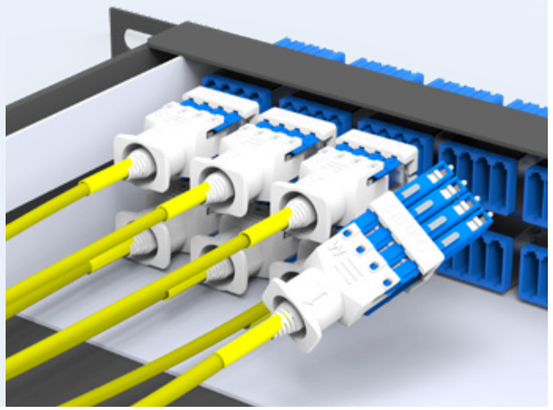
SN® Application Guide

Base-8 Structured Cabling

The SN® Uniboot is a logical choice when building high-density, Base-8 topologies. It speeds up installation time and reduces cable bulk dramatically. Alternatively, the SN® Standard or EZ-Flip can be ganged together using a plastic clip and breakout cables or fanouts can be deployed in the same way.

SN® Uniboot Connector

SN EZ-Flip Connector

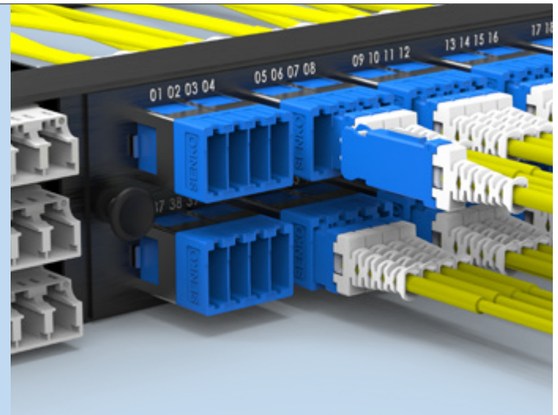


Individual SN® Patching

The SN® Standard and EZ-Flip connector are the right choice for plugging into the front side of patch panels or transceivers. The EZ-Flip is the only option that allows polarity switching in the field.

SN® 1.6mm/
2.0mm Connector

SN® EZ-Flip Connector

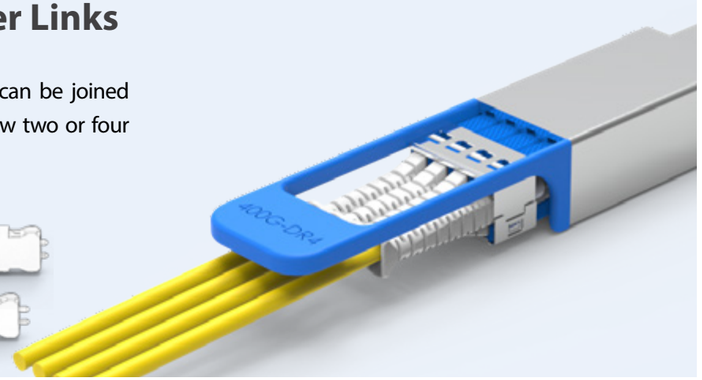


Dual & Quad Transceiver Links

The SN® Standard and EZ-Flip connector can be joined together with special metal clips that allow two or four connectors to be patched simultaneously.

SN® 1.6mm/
2.0mm Connector

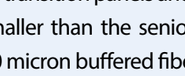
SN® EZ-Flip Connector



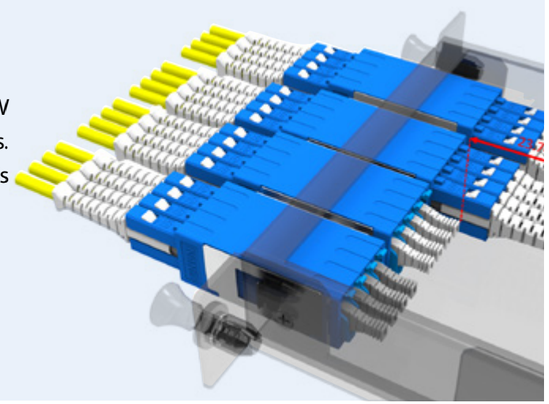
SN® Application Guide

Standard BTW

The Junior connector is the right choice for most BTW applications such as transition panels and LGX-style modules. It is significantly smaller than the senior connectors and is compatibe with 900 micron buffered fibers.



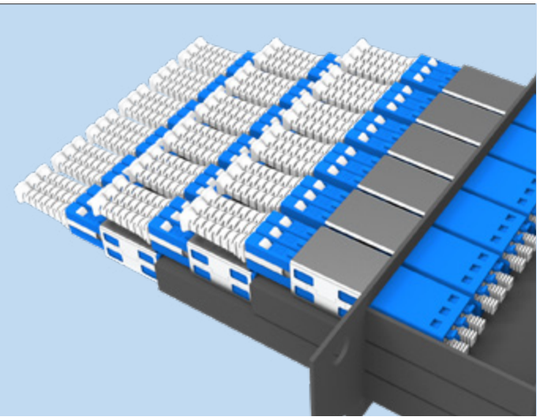
SN® Junior Connector



Reduced Height BTW

The Compact connector has a reduced height which allows it to fit inside miniature cassettes that do not have space for the standard Junior connector. These cassettes are often stacked 3-high within 1RU chassis.

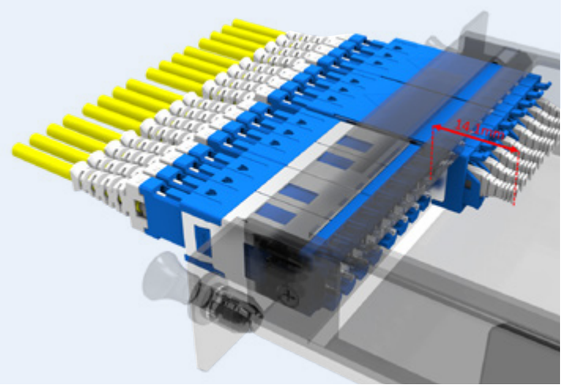
SN® Compact Connector



Reduced Depth BTW

The Mini connector is the shortest connector for BTW applications is a great choice when you need to utilize BTW space for optoelectronic equipment or other vital system components.

SN® Mini Connector



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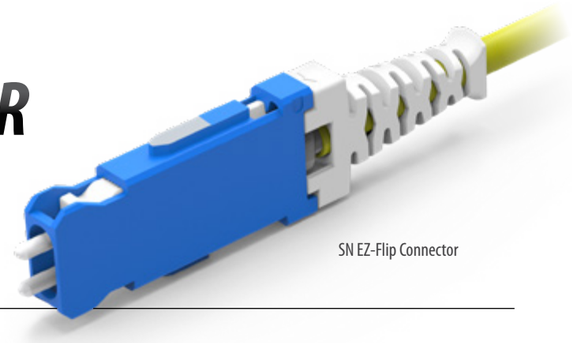
SN® EZ-FLIP® CONNECTOR

1-Channel (2F)
Switchable Polarity



SN EZ-Flip Connector

The SN® connector is the ultimate duplex connector combining 'best-in-class' packing density with carrier-grade performance and reliability. Designed and optimized for next-generation data rates, the SN® connector offers network operators the chance to densify their existing legacy infrastructure whilst at the same time providing an upgrade path to 400G and beyond.

The SN® EZ-Flip connector is the latest addition to the SN® family, allowing technicians to switch polarity in the field without disrupting fibers or repositioning ferrules. Not only can the polarity be changed with UPC ferrules, but APC connectors can also be polarity-flipped thanks to the unique orientation of the angled ferrules.

The SN® EZ-Flip connector has an integrated 'push-pull' boot that simplifies insertion and removal of the connector even in high-density patch panels where finger access is limited. A gang-clip can be added to two or four individual SN® connectors allowing them to be patched simultaneously to compatible adapters and transceivers.

FEATURES

- Meets IEC random mating Grade B
- Very Small Form Factor (VSFF) connector, 3 x fiber cabling density over duplex LC
- Push-pull boot for simple installation and removal
- Optimized for 400G data rates with QSFP-DD, OSFP, and SFP-DD transceivers
- Up to 4 x SN® connectors per transceiver
- Direct transceiver breakout in spine/leaf architectures
- Fast and easy polarity reversal of both UPC and APC connectors in the field
- Combines two 1.25 mm ceramic ferrules
- Pre-assembled design for fast assembly

APPLICATIONS

- High-density patching and equipment jumpers
- QSFP-DD, OSFP and SFP-DD transceiver links for higher data rates
- Hybrid duplex cable assemblies combining SN® and other duplex connector types
- Hyperscale, edge, enterprise, and colocation data centers

MEDIA

Click to Watch Videos

VIDEO

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fiber Count	Duplex *(2 fibers)*
Cable Suitablity	1.6 mm/2.0 mm jacketed
Ferrule Material	Zirconia
Dust Protection Method	Removable dust plugs that encapsulate the ferrules

Optical Data

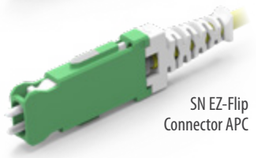
	Singlemode				Multimode
	UPC		APC		MM
	SM Premium Low Loss	SM Premium	SM Premium Low Loss	SM Premium	Premium
Typical Insertion Loss (dB)*	0.05	0.08	0.07	0.12	0.05
Max. Insertion Loss (dB)*	0.15	0.20	0.15	0.25	0.15
Typical Return Loss (dB)*	≥55		≥65		≥25
Ferrule Diameter (µm)	125.5				127

** Based on master grade jumper to low loss random mating test*

ORDERING

SN EZ-Flip Connector UPC

CONNECTOR TYPE		PERFORMANCE		HOUSING COLOR		BOOT TYPE		BOOT COLOR	
6A5	SN EZ-Flip Connector UPC Preassembled for 2 mm Cable	151	SM Premium	1	Blue	4	44mm Boot (44T)	1	White
6A6	SN EZ-Flip Connector UPC Preassembled for 1.6 mm cable	158	SM Premium Low Loss	5	Aqua				
		251	MM Premium	6	Heather Violet				

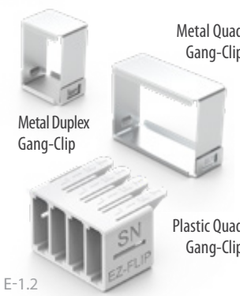


SN EZ-Flip Connector APC

CONNECTOR TYPE		PERFORMANCE		HOUSING COLOR		BOOT TYPE		BOOT COLOR	
6D5	SN EZ-Flip Connector APC Unassembled for 2 mm Cable	153	APC Premium	3	Green	4	44mm Boot (44T)	1	White
6D6	SN EZ-Flip Connector APC Unassembled for 1.6 mm Cable	158	APC Premium Low Loss						

6D5 - 153 - 341 ORDER CODE example

Note: Connector supplied with protective dust-cap



Metal Quad Gang-Clip

Metal Duplex Gang-Clip

Plastic Quad Gang-Clip

PART NUMBER	
6A5-CLIP-QD-01	Metal Quad Gang-clip for QSFP-DD and OSFP Transceivers *(SN EZ-Flip Connectors Only)*
6A5-CLIP-DX-01	Metal Duplex Gang-clip for SFP-DD Transceivers *(SN EZ-Flip Connectors Only)*

PART NUMBER	
6A5-CLIP-QD-02	Plastic Quad Gang-clip for Shuttered Adapters or Adapters with Walls Between Each Port

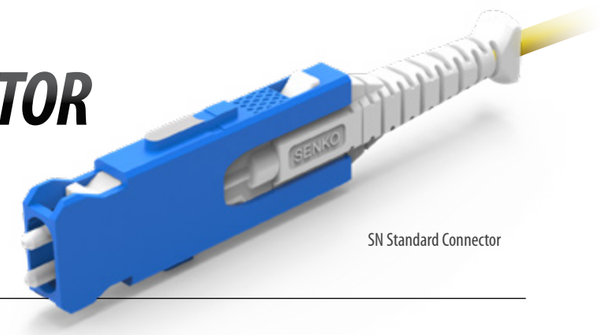
6A5-CLIP-QD-02 ORDER CODE example

Note: Works with all SN EZ-Flip configurations

SENKO®
Advanced Components

SN® STANDARD CONNECTOR

1-Channel (2F)
1.6 mm Cable



SN Standard Connector

The SN® connector is the ultimate Base-2 connector combining 'best-in-class' packing density with carrier-grade performance and reliability. Designed and optimized for next-generation data rates, the SN® connector offers network operators the chance to densify their existing legacy infrastructure whilst at the same time providing an upgrade path to 400G and beyond.

The SN® Standard connector is suitable for termination to 1.6 mm round cable that incorporates a ruggedized jacket and internal strain relief.

The SN® Standard connector has an integrated 'push-pull' boot that simplifies insertion and removal of the connector even in dense patch panels where finger access is limited. A gang-clip can be added to four individual SN® connectors allowing them to be patched simultaneously to either adapters or 4-channel (8 fibers) transceivers (subject to product selection).

FEATURES

- Meets IEC random mating Grade B
- Very Small Form Factor (VSFF) connector, 3 x fiber cabling density over Duplex LC
- Unique push-pull boot for simple installation and removal
- Optimized for 400G data rates with QSFP-DD, OSFP and SFP-DD transceivers
- Up to 4 x SN® connectors per transceiver
- Direct transceiver breakout in spine/leaf architectures
- Combines two 1.25 mm ceramic ferrules
- Easy identification of the connector alignment key

APPLICATIONS

- High-density patching
- QSFP-DD, OSFP and SFP-DD transceiver links for higher data rates
- Hybrid Base-2 cable assemblies combining SN® and other duplex connector types
- Hyperscale, edge, enterprise and colocation data centers

KEY BENEFITS

✔ **Optimized for patching**

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fiber Count	Duplex *(2 fibers)*
Cable Suitablity	1.6 mm jacketed
Ferrule Material	Zirconia
Dust Protection Method	Removable dust plugs that encapsulate the ferrules

Optical Data

	Singlemode				Multimode
	UPC		APC		MM
	SM Premium Low Loss	SM Premium	SM Premium Low Loss	SM Premium	Premium
Typical Insertion Loss (dB)*	0.05	0.08	0.07	0.12	0.05
Max. Insertion Loss (dB)*	0.15	0.20	0.15	0.25	0.15
Typical Return Loss (dB)*	≥55		≥65		≥25
Ferrule Diameter (µm)	125.5				127

** Based on master grade jumper to low loss random mating test*

ORDERING


SN Connector
UPC with Flex Angle Boot

CONNECTOR TYPE		PERFORMANCE		HOUSING COLOR		BOOT TYPE		BOOT COLOR	
602	SN Connector UPC Unassembled for 1.6 mm Cable	**151**	SM Premium	**1**	Blue	**1**	50 mm Boot (50T)	**1**	White
		158	SM Premium Low Loss	**5**	Aqua	**B**	Flex-Angled Boot (57T)		
		251	MM Premium	**6**	Heather Violet	**C**	Flex-Angled Boot (63T)		
						D	Flex-Angled Boot (71T)		


SN Connector
APC for 1.6 mm Cable

CONNECTOR TYPE		PERFORMANCE		HOUSING COLOR		BOOT TYPE		BOOT COLOR	
612	SN Connector APC Unassembled for 1.6 mm Cable	**153**	APC Premium	**3**	Green	**1**	50 mm Boot (50T)	**1**	White
		158	APC Premium Low Loss			**B**	Flex-Angled Boot (57T)		
						C	Flex-Angled Boot (63T)		
						D	Flex-Angled Boot (71T)		

Note: Connector supplied with protective dust-cap


Metal Quad
Gang-Clip

PART NUMBER	
602-CLIP-QD-01	Metal Quad Gang-clip for QSFP-DD Transceivers
602-CLIP-DX-01	Metal Duplex Gang-clip for SFP-DD Transceivers

Plastic Quad
Gang-Clip

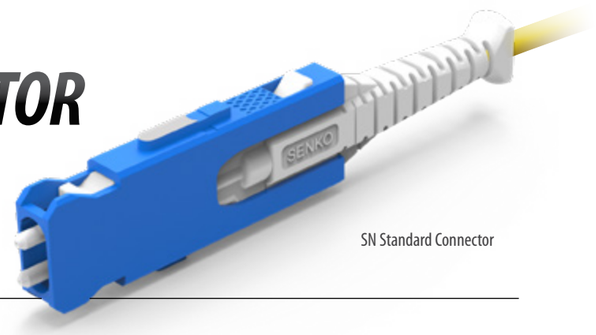
PART NUMBER	
602-CLIP-QD-02	Plastic Quad Gang-clip for Shuttered Adapters or Adapters with Walls Between Each Port

602-CLIP-QD-02 ORDER CODE example

SENKO®
Advanced Components

SN® STANDARD CONNECTOR

1-Channel (2F)
2.0 mm Cable



SN Standard Connector

The SN® connector is the ultimate Base-2 connector combining 'best-in-class' packing density with carrier-grade performance and reliability. Designed and optimized for next-generation data rates, the SN® connector offers network operators the chance to densify their existing legacy infrastructure whilst at the same time providing an upgrade path to 400G and beyond.

The SN® Standard connector is suitable for termination to 2.0 mm round cable that incorporates a ruggedized jacket and internal strain relief.

The SN® Standard connector has an integrated 'push-pull' boot that simplifies insertion and removal of the connector even in dense patch panels where finger access is limited. A gang-clip can be added to four individual SN® connectors allowing them to be patched simultaneously to either adapters or 4-channel (8 fibers) transceivers (subject to product selection).

FEATURES

- Meets IEC random mating Grade B
- Very Small Form Factor (VSFF) connector, 3 x fiber cabling density over duplex LC
- Unique push-pull boot for simple installation and removal
- Optimized for 400G data rates with QSFP-DD, OSFP and SFP-DD transceivers
- Up to 4 x SN® connectors per transceiver
- Direct transceiver breakout in spine/leaf architectures
- Combines two 1.25 mm ceramic ferrules
- Easy identification of the connector alignment key

APPLICATIONS

- High-density patching
- QSFP-DD, OSFP and SFP-DD transceiver links for higher data rates
- Hybrid Base-2 cable assemblies combining SN® and other duplex connector types
- Hyperscale, edge, enterprise and colocation data centers

KEY BENEFITS

✔ **Optimized for patching**

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fiber Count	Duplex *(2 fibers)*
Cable Suitablity	2.0 mm jacketed
Ferrule Material	Zirconia
Dust Protection Method	Removable dust plugs that encapsulate the ferrules

Optical Data

	Singlemode				Multimode
	UPC		APC		MM
	SM Premium Low Loss	SM Premium	SM Premium Low Loss	SM Premium	Premium
Typical Insertion Loss (dB)*	0.05	0.08	0.07	0.12	0.05
Max. Insertion Loss (dB)*	0.15	0.20	0.15	0.25	0.15
Typical Return Loss (dB)*	≥55		≥65		≥25
Ferrule Diameter (µm)	125.5				127

** Based on master grade jumper to low loss random mating test*

ORDERING


SN Connector
UPC with Flex Angle Boot

CONNECTOR TYPE		PERFORMANCE		HOUSING COLOR		BOOT TYPE		BOOT COLOR	
604	SN Connector UPC Unassembled for 2 mm Cable	**151**	SM Premium	**1**	Blue	**1**	50 mm Boot (50T)	**1**	White
		158	SM Premium Low Loss	**5**	Aqua	**B**	Flex-Angled Boot (57T)		
		251	MM Premium	**6**	Heather Violet	**C**	Flex-Angled Boot (63T)		
						D	Flex-Angled Boot (71T)		


SN Connector
APC for 2 mm Cable

CONNECTOR TYPE		PERFORMANCE		HOUSING COLOR		BOOT TYPE		BOOT COLOR	
614	SN Connector APC Unassembled for 2 mm Cable	**153**	APC Premium	**3**	Green	**1**	50 mm Boot (50T)	**1**	White
		158	APC Premium Low Loss			**B**	Flex-Angled Boot (57T)		
						C	Flex-Angled Boot (63T)		
						D	Flex-Angled Boot (71T)		

614 - 153 - 311 ORDER CODE example

Note: Connector supplied with protective dust-cap


Metal Quad
Gang-Clip

PART NUMBER	
602-CLIP-QD-01	Metal Quad Gang-clip for QSFP-DD Transceivers
602-CLIP-DX-01	Metal Duplex Gang-clip for SFP-DD Transceivers

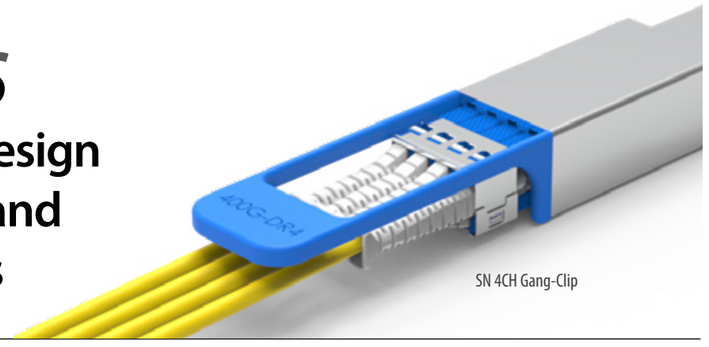

Plastic Quad
Gang-Clip

PART NUMBER	
602-CLIP-QD-02	Plastic Quad Gang-clip for Shuttered Adapters or Adapters with Walls Between Each Port

602-CLIP-QD-02 ORDER CODE example

SENKO®
Advanced Components

SN® GANG-CLIPS
Quad and Duplex Design for QSFP-DD, OSFP and SFP-DD Transceivers



SN 4CH Gang-Clip

SENKO's SN® Gang-clips are designed to hold four individual SN® connectors side by side so they can be plugged into either 4-channel QSFP-DD, OSFP or 2-channel SFP-DD transceivers simultaneously. This speeds up the patching time and simplifies the process of patching multiple connectors - it also allows the four duplex connectors to act as a single Base-4 or Base-8 connector.

The Gang-clip is generally deployed in transceiver breakout applications where, for example, a single 400G transceiver is broken out to 4 x 100G transceivers within spine-leaf architectures. The Quad Gang-clip is also compatible with non-shuttered SN® adapters that share the same footprint as QSFP-DD and OSFP transceivers.

FEATURES

- Allows multiple SN® connectors to be patched simultaneously
- The compact design prevents interference with transceiver pull-tab
- Suitable for QSFP-DD, OSFP and SFP-DD transceivers

APPLICATIONS

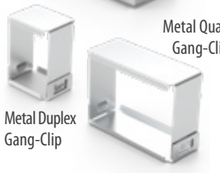
- Transceiver breakout applications
- Spine-leaf architectures
- Enterprise data centers
- Patching to standard SN® non-shuttered adapters

KEY BENEFITS

- **Patch 4 x SN® simultaneously to QSFP-DD and OSFP**
- **Patch 2 x SN® simultaneously to SFP-DD**

ORDERING


Metal Quad Gang-Clip

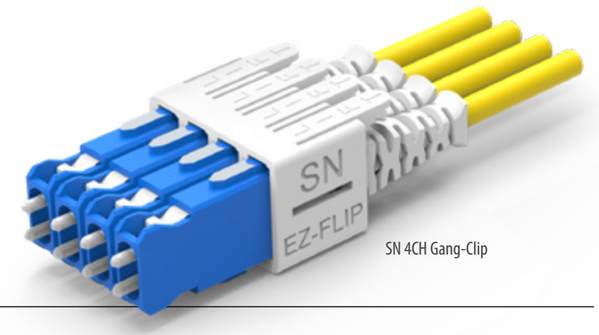

Metal Duplex Gang-Clip

PART NUMBER	
602-CLIP-QD-01	Metal Quad Gang-clip for QSFP-DD and OSFP Transceiver Types *(Standard SN Connectors Only)*
602-CLIP-DX-02	Metal Duplex Gang-clip for SFP-DD Transceiver Types *(Standard SN Connectors Only)*

PART NUMBER	
6A5-CLIP-QD-01	Metal Quad Gang-clip for QSFP-DD and OSFP Transceivers *(SN EZ-Flip Connectors Only)*
6A5-CLIP-DX-01	Metal Duplex Gang-clip for SFP-DD Transceivers *(SN EZ-Flip Connectors Only)*

602-CLIP-DX-02 ORDER CODE example

SN® GANG-CLIPS
Quad Design for 4-Channel Shuttered Adapters



SN 4CH Gang-Clip

SENKO's SN® Gang-clips are designed to hold four individual SN® connectors side by side so they can be plugged into shuttered adapters (or adapters with walls between each channel) simultaneously. This unique functionality dramatically reduces the installation time required to patch multiple connectors to high-density patch panels, as well as allowing the four duplex connectors to act as one Base-8 connector.

The Gang-clip can be used to combine four individual connectors from duplex patch cords or alternatively, four connectors from a breakout cable or fanout cable. The Gang-clip is a critical solution in applications where multiple Base-8 connections are being patched to the rear side of a patch panels. Individual SN® connectors can be inserted or removed from the 4-way gang-clip thanks to flexible locking clips located on the upper face of the clip.

FEATURES

- Allows multiple SN® connectors to be patched simultaneously
- Connectors can be individually inserted and removed without disruption to adjacent connectors
- Compact design
- Suitable for shuttered 4-channel SN® adapters

APPLICATIONS

- Base-8 trunk deployment
- Patch cord consolidation
- Breakout and Fanout cable assemblies
- High fiber-count backbone trunks
- Enterprise data centers

KEY BENEFITS

- **Add and remove individual connectors**
- **Allows 4 x SN® connectors to be patched simultaneously**

ORDERING

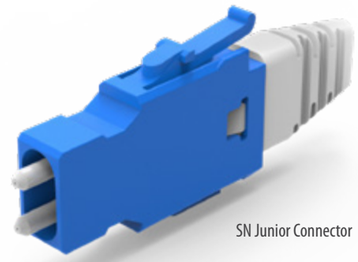
Plastic Quad Gang-Clip
SN EZ-Flip Connector

PART NUMBER	
6A5-CLIP-QD-02	Plastic Quad Gang-clip for Shuttered Adapters or Adapters with Walls Between Each Port *(SN EZ-Flip Connectors Only)* - Color White
602-CLIP-QD-02	Plastic Quad Gang-clip for Shuttered Adapters or Adapters with Walls Between Each Port *(Standard SN Connectors Only)* - Color White

6A5-CLIP-QD-02 ORDER CODE example

SENKO®
Advanced Components

SN® JUNIOR CONNECTOR
1-Channel (2F)
BTW (Behind The Wall)


SN Junior Connector

The SN® Junior connector is designed for applications that require less space consumption BTW (Behind The Wall) than conventional patch cord connectors. With a much shorter body length and boot length than conventional connectors, the SN® Junior offers users the chance to reduce the depth of transition cassettes and modules as well as free up valuable space within fiber management panels for additional hardware such as splice cassettes, coherent devices or optoelectronic equipment.

The SN® Junior connector has a latch on the upper side of the connector that provides an audible click when it is plugged into an adapter. At the rear of the connector is a boot that will accept two 600 or 900-micron buffered fibers. Junior connectors are most commonly used for applications such as pigtail splicing or transition assemblies where multi-fiber connectors break out to multiple duplex connectors within the same module or panel.

SN® Junior connectors are compatible with standard SN® adapters and SC Footprint SN® adapters.

FEATURES

- Meets IEC random mating Grade B
- Upper latch mechanism with an audible click
- Reduced connector/boot length
- Single boot for 2 x 600/900µm buffered fibers
- UPC and APC versions available
- Proven LC ferrule technology
- Extra small for space-limited applications

APPLICATIONS

- Pigtail splicing modules and panels
- Coherent and On-Board optics
- MPO/SN-MT to SN® transition modules
- Optoelectronic equipment
- Shallow-depth cassettes

KEY BENEFITS

✔ **Reduced connector length**

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fiber Count	Duplex *(2 fibers)*
Cable Suitablity	2 x 600/900µm buffered fibers
Ferrule Material	Zirconia
Dust Protection Method	Removable dust plugs that encapsulate the ferrules

Optical Data

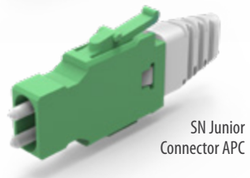
	Singlemode				Multimode
	UPC		APC		MM
	SM Premium Low Loss	SM Premium	SM Premium Low Loss	SM Premium	Premium
Typical Insertion Loss (dB)*	0.05	0.08	0.07	0.12	0.05
Max. Insertion Loss (dB)*	0.15	0.20	0.15	0.25	0.15
Typical Return Loss (dB)*	≥55		≥65		≥25
Ferrule Diameter (µm)	125.5				127

* *Based on master grade jumper to low loss random mating test*

ORDERING


SN Junior Connector UPC

CONNECTOR TYPE		PERFORMANCE		HOUSING COLOR		BOOT COLOR	
603	SN Junior Connector UPC	**151**	SM Premium	**1**	Blue	**1**	White
		158	SM Premium Low Loss	**5**	Aqua		
		251	MM Premium	**6**	Heather Violet		


SN Junior Connector APC

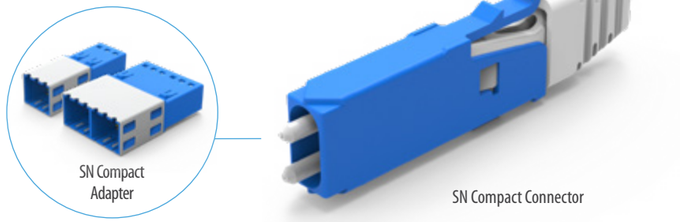
CONNECTOR TYPE		PERFORMANCE		HOUSING COLOR		BOOT COLOR	
613	SN Junior Connector APC	**153**	APC Premium	**3**	Green	**1**	White
		158	APC Premium Low Loss				

613 - 153 - 31 ORDER CODE example

Note: 1. The SN Junior Connector was previously called the BTW1 Connector
2. Connector supplied with protective dust-cap

SENKO Advanced Components

SN® CONNECTOR
Compact
1-Channel (2F)
BTW (Behind The Wall)



SENKO's SN® Compact connector is explicitly designed for the SN® Compact adapter series in BTW (Behind The Wall) applications and is often deployed inside miniature cassette systems with little or no space above or below the adapters. The compact series allows for 3-channel and 6-channel configurations to suit different cassette types and fiber counts.

The SN® Compact Connector features a latch-locking mechanism to confirm engagement with the adapter and uses industry-standard 1.25 mm ferrule technology that has been used in LC connectors for decades.

SENKO offers product development support for hardware vendors and solution providers that want to adapt the SN® compact series to fit their particular fiber-management system or application.

FEATURES

- Meets IEC random mating Grade B
- Upper latch mechanism with an audible click
- Reduced connector height for low-profile cassette systems
- Works with SN® Compact adapters
- Single boot for 2 x 600/900 µm buffered fibers
- UPC and APC versions are available
- Proven LC ferrule technology

APPLICATIONS

- Miniature low-profile cassettes
- High-density patch panels
- 1RU panels with three rows of adapters
- Front access fiber management systems

KEY BENEFITS

✔ **Reduced connector height**

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fiber Count	Duplex *(2 fibers)*
Cable Suitablity	2 x 600/900 µm buffered fibers
Ferrule Material	Zirconia
Dust Protection Method	Removable dust plugs that encapsulate the ferrules

Optical Data

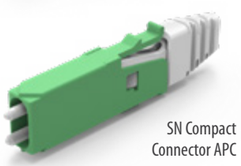
	Singlemode				Multimode
	UPC		APC		MM
	SM Premium Low Loss	SM Premium	SM Premium Low Loss	SM Premium	Premium
Typical Insertion Loss (dB)*	0.05	0.08	0.07	0.12	0.05
Max. Insertion Loss (dB)*	0.15	0.20	0.15	0.25	0.15
Typical Return Loss (dB)*	≥55		≥65		≥25
Ferrule Diameter (µm)	125.5				127

** Based on master grade jumper to low loss random mating test*

ORDERING

SN Compact Connector UPC

CONNECTOR TYPE		PERFORMANCE		HOUSING COLOR		BOOT COLOR	
606	SN Compact Connector UPC	**151**	SM Premium	**1**	Blue	**1**	White
		158	SM Premium Low Loss	**5**	Aqua		
		251	MM Premium	**6**	Heather Violet		



SN Compact Connector APC

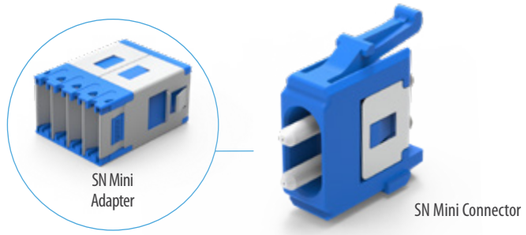
CONNECTOR TYPE		PERFORMANCE		HOUSING COLOR		BOOT COLOR	
616	SN Compact Connector APC	**153**	APC Premium	**3**	Green	**1**	White
		158	APC Premium Low Loss				

616 - 153 - 31 ORDER CODE example

Note: 1. The SN Compact connector was previously called the BTW2 Connector
2. Connector supplied with protective dust-cap

SENKO®
Advanced Components

SN® MINI CONNECTOR
1-Channel (2F)
BTW (Behind The Wall)



The SN® Mini connector is the shortest connector in the SN® family and offers users the most space-efficient solution for applications demanding optimized BTW (Behind The Wall) space-saving. In combination with SN® Mini adapters, as much as 14.1 mm can be saved compared with standard adapters and connectors, making it the ideal solution for opto-electronic applications requiring circuit boards or other vital components to share the same BTW space as fiber optic connectivity.

The SN® Mini connector is a duplex design that combines two spring loaded 1.25 mm ceramic ferrules in a single miniature housing. On the upper face of the connector, there is a latch locking mechanism to maintain secure engagement to the adapter providing users with the additional benefit of an audible click.

FEATURES

- Up to 70% BTW space-saving compared with standard connectors
- Accepts 2 x 600/900 µm buffered fibers
- Uses proven LC ferrule technology
- Integrated upper latch for secure coupling
- Supports 200G/400G VSFF connectivity
- Telcordia, ANSI, TIA and IEC compliant
- Color-code for to denote optical performance

APPLICATIONS

- Coherent optic systems
- WDM systems
- Optoelectronic devices
- Automated robotic switches
- Ultra-short cassettes and modules

KEY BENEFITS

✔ **Maximum BTW space**

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fiber Count	Duplex *(2 fibers)*
Cable Suitablity	2 x 600/900 µm buffered fibers
Ferrule Material	Zirconia
Dust Protection Method	Removable dust plugs that encapsulate the ferrules

Optical Data

	Singlemode				Multimode
	UPC		APC		MM
	SM Premium Low Loss	SM Premium	SM Premium Low Loss	SM Premium	Premium
Typical Insertion Loss (dB)*	0.05	0.08	0.07	0.12	0.05
Max. Insertion Loss (dB)*	0.15	0.20	0.15	0.25	0.15
Typical Return Loss (dB)*	≥55		≥65		≥25
Ferrule Diameter (µm)	125.5				127

** Based on master grade jumper to low loss random mating test*

ORDERING

SN Mini Connector UPC

CONNECTOR TYPE		PERFORMANCE		HOUSING COLOR	
609	SN Mini Connector	**151**	SM Premium	**1**	Blue
		158	SM Premium Low Loss	**5**	Aqua
		251	MM Premium	**6**	Heather Violet

SN Mini Connector APC

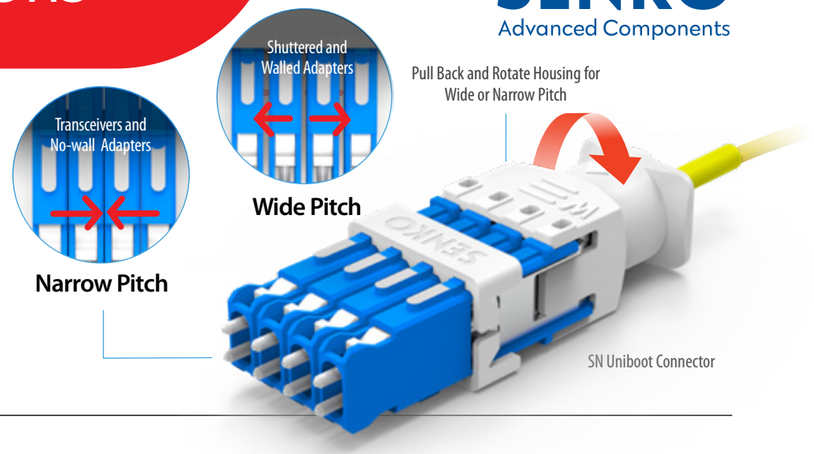
CONNECTOR TYPE		PERFORMANCE		HOUSING COLOR	
619	SN Mini APC Connector	**153**	APC Premium	**3**	Green
		158	APC Premium Low Loss		

619 - 153 - 3 ORDER CODE example

Note: 1. SN Mini Connector has no boot
2. Connector supplied with protective dust-cap

SENKO®
Advanced Components

SN® UNIBOOT CONNECTOR
4-Channel (8F) Variable Pitch



The SN® Uniboot is a revolutionary connector that allows four duplex SN® connectors to be patched simultaneously in one operation. Subsequently, the SN® Uniboot offers the same degree of flexibility as an MPO 8-fiber connector but without the need for breakout cassettes or fan-out cables to transition from Base-8 to Base-2. This dual functionality makes the SN® Uniboot granular enough for duplex server connections, optimized for high-density trunks and the perfect match to high data rate transceivers utilizing four optical lanes (8 fibers).

The SN® Uniboot is the first telco-grade connector that combines the performance and reliability of ceramic ferrules with the modularity and scalability of the MPO connector. Network operators can now build networks that are more cost effective, more flexible and provide extended reach at higher data rates.

The SN® Uniboot connector boasts a distinctive feature, as it can be adjusted to accommodate either narrow adapters (those without walls between ports) or wide adapters (equipped with walls between ports). The SN® Uniboot is only compatible with adapters that have 4-ports vertically aligned.

FEATURES

- Fast patching with uniboot design
- Base-8 and Base-2 compatibility
- Allows up to 432 fibers per 1RU (Rack Unit)
- Eliminates the need for fan-outs and cassettes
- Provides ferrule-based alternative to MPO
- Increased flexibility and extended reach
- Significantly lower total cost of ownership
- Telco grade optics with zirconia ferrules
- Less complexity versus MPO
- Suitable for adapters with or without walls between ports

APPLICATIONS

- Base-2 server consolidation
- Base-8 switch replication
- Telco exchanges
- Broadcast
- Enterprise network
- Colocation data centers
- Finance data centers
- Backbone trunk cabling

KEY BENEFITS

✔ **Base-8 and Base-2 compatibility**
✔ **Trunk cable systems**

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fiber Count	Base-8 *(8 fibers)*
Cable Suitablity	8-fiber micro cable
Ferrule Material	Zirconia
Dust Protection Method	Removable dust plugs that encapsulate the ferrules

Optical Data

	Singlemode				Multimode
	UPC		APC		MM
	SM Premium Low Loss	SM Premium	SM Premium Low Loss	SM Premium	Premium
Typical Insertion Loss (dB)*	0.05	0.08	0.07	0.12	0.05
Max. Insertion Loss (dB)*	0.15	0.20	0.15	0.25	0.15
Typical Return Loss (dB)*	≥55		≥65		≥25
Ferrule Diameter (µm)	125.5				127

** Based on master grade jumper to low loss random mating test*

ORDERING

SN Uniboot Connector UPC

CONNECTOR TYPE
SN Uniboot Connector UPC Unassembled

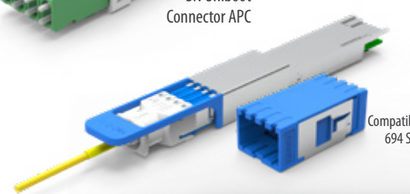
SN Uniboot Connector APC

CONNECTOR TYPE
SN Uniboot Connector APC

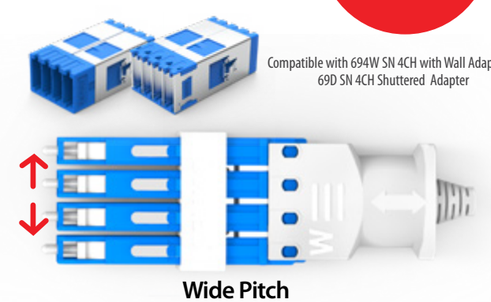
Note: Connector supplied with protective dust-cap

Contact sales@senko.com for availability and to learn more

Contact SENKO



Compatible with 4CH Transceiver or 694 SN 4CH No Wall Adapter



Compatible with 694W SN 4CH with Wall Adapter or 69D SN 4CH Shuttered Adapter

Narrow Pitch **Wide Pitch**

Leading the Fiber Optic Revolution

885+ million connectors deployed globally

97+ million connectors sold in 2022

15 new products released in 2020

590 patents granted globally

90+ VSFF patents globally

SN® ADAPTER

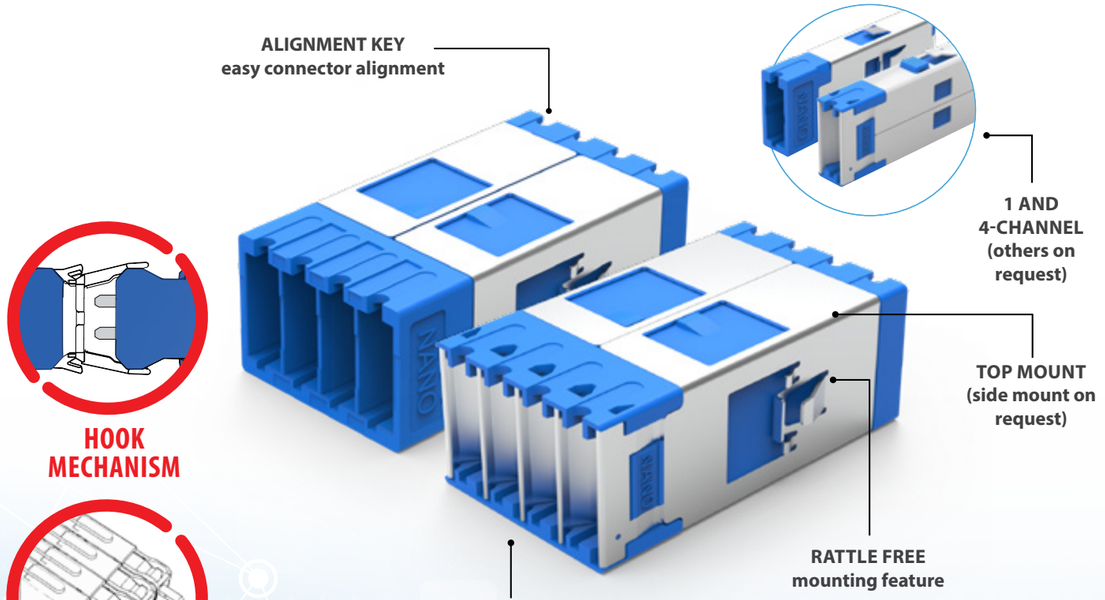
PATENTED PRODUCT senko.com/patents

IEC 61754-36

RoHS Reach SVHC UL

SENKO Products are RoHS, Reach SVHC and UL 94 V-0 compliant.

Compact and modular adapters in a wide range of footprints to deliver maximum patch panel density across the network



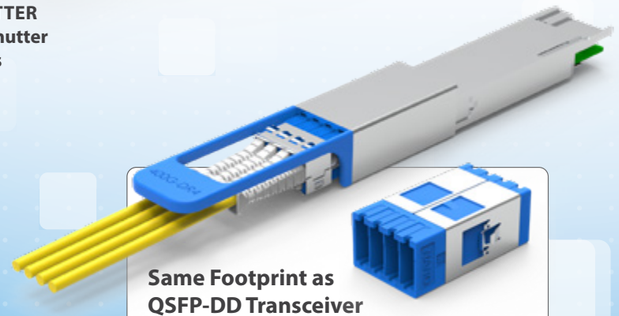
HOOK MECHANISM

UNIBOOT COMPATIBLE

432 FIBERS PER 1RU

VIDEO

SN STANDARD ADAPTERS



Same Footprint as QSFP-DD Transceiver

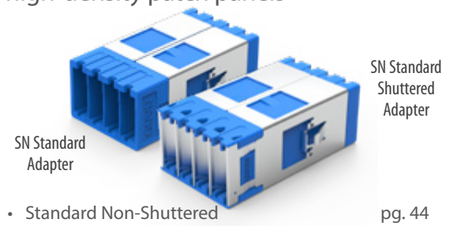
The non-shuttered SN® adapter has the same footprint as the 4-port QSFP-DD transceiver making it the perfect choice for switch replication at the patch panel.

SENKO®
Advanced Components

SENKO's Adapters Designed for the Next Generation Data Centers

SN® ADAPTER Standard

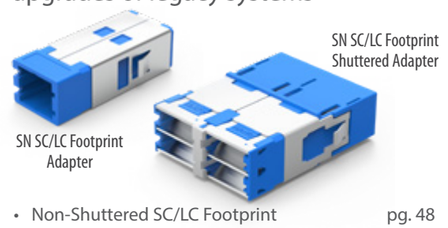
Standard 1 and 4-channel adapters for high-density patch panels



- Standard Non-Shuttered pg. 44
- Standard Shuttered pg. 46

SN® ADAPTER SC/LC Footprint

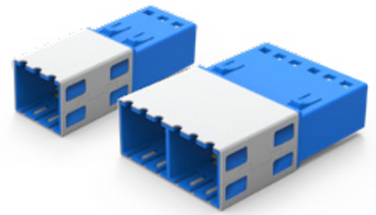
SC/LC footprint adapters for easy upgrades of legacy systems



- Non-Shuttered SC/LC Footprint pg. 48
- Shuttered SC/LC Footprint pg. 50

SN® ADAPTER Compact

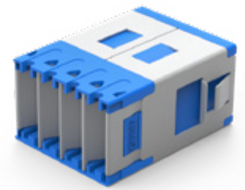
Compact adapters for low-profile miniature cassette systems



- SN® Compact pg. 52

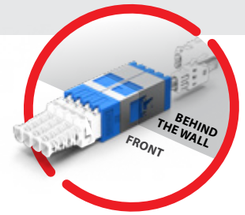
SN® MINI ADAPTER

Mini adapters for maximum BTW space-saving



- SN® Mini pg. 54

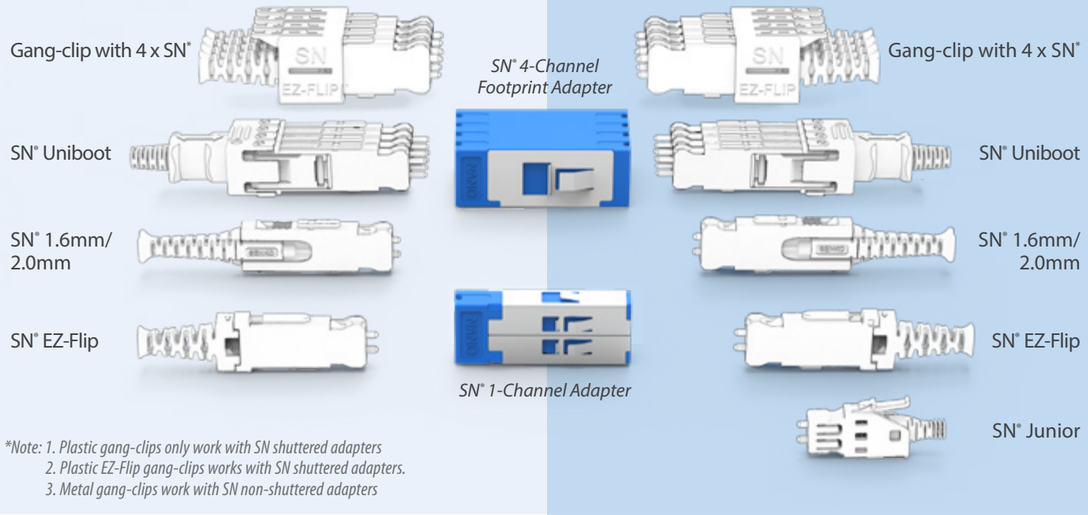
Adapter Selection Guide



FRONT Connector Options

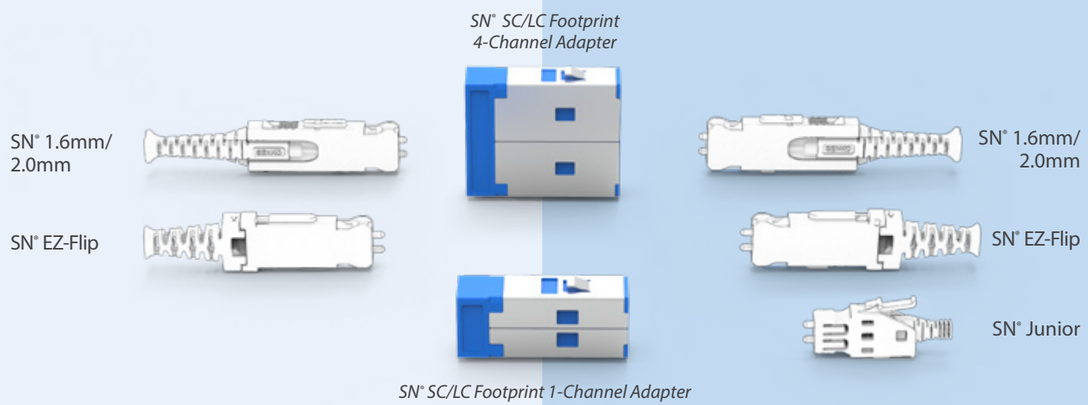
BTW Connector Options

SN® Shuttered and Non-Shuttered Adapter



*Note: 1. Plastic gang-clips only work with SN shuttered adapters
2. Plastic EZ-Flip gang-clips works with SN shuttered adapters.
3. Metal gang-clips work with SN non-shuttered adapters

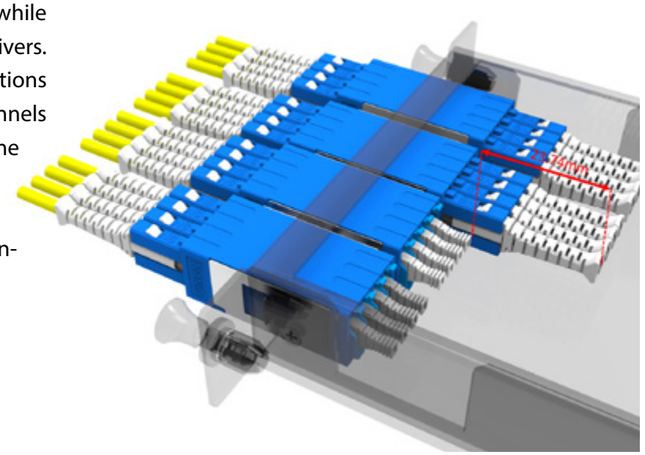
SN® SC/LC Footprint Shuttered and Non-Shuttered Adapter



Real World Applications

SN® ADAPTER
Suitable for Most Applications

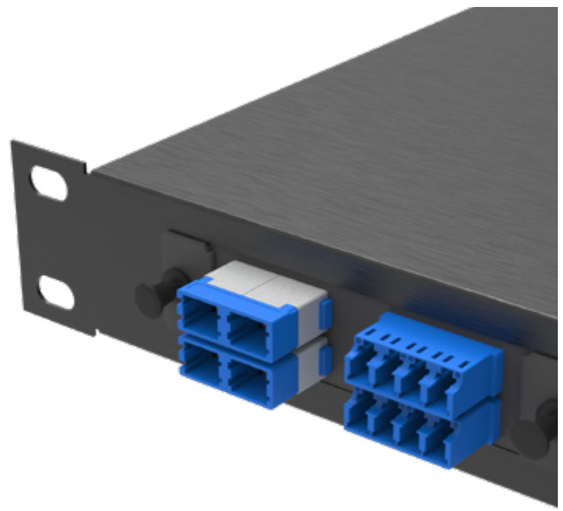
The SN® adapters can maximize port density while having the same footprint size as QSFP-DD transceivers. The 1-channel (2 fibers) is designed for applications requiring the separation of individual optical channels such as coherent optics or wave-splitting. The 4-channel (8 fibers) version allows operators to replicate switch-ports with inter-connected patch panels on a 1:1 basis. Shuttered and non-shuttered configurations available.



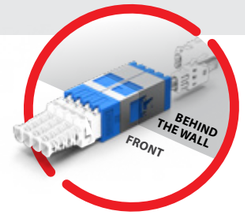
SN® SC/LC FOOTPRINT ADAPTER
Retro-Fittable to SC/LC Footprint

Upgrade your system to SN® hyper-density without re-designing your current panels or hardware. The SC/LC footprint adapters are designed to fit legacy hardware incorporating an SC/LC cut-out, maximizing your current set-up without a costly overhaul.

These retro-fittable adapters are the ideal choice for cabling providers or equipment manufacturers. The 2-channel adapter fits into legacy hardware incorporating the SC duplex (LC quad) cut-out, while the 4-channel version incorporates the SC duplex (LC quad) cut-out.



Adapter Selection Guide



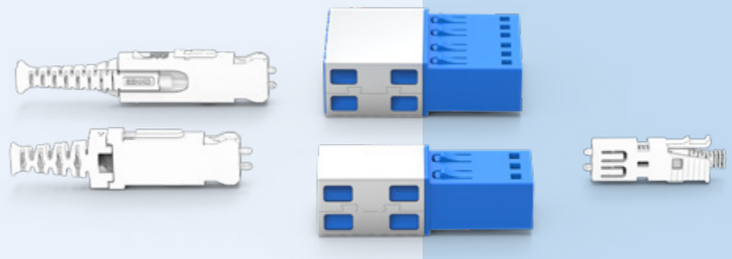
FRONT Connector Options

BTW Connector Options

SN® Compact Adapter

SN® 1.6mm/ 2.0mm

SN® EZ-Flip



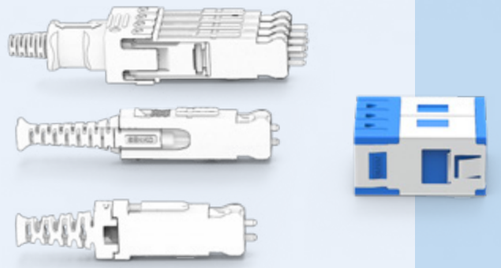
SN® Compact ONLY

SN® Mini Adapter

SN® Uniboot

SN® 1.6mm/ 2.0mm

SN® EZ-Flip



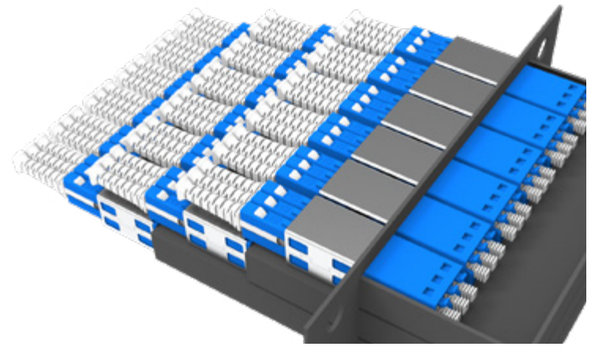
SN® Mini ONLY

Real World Applications

SN® COMPACT ADAPTER

Lowest Height for BTW Cassettes

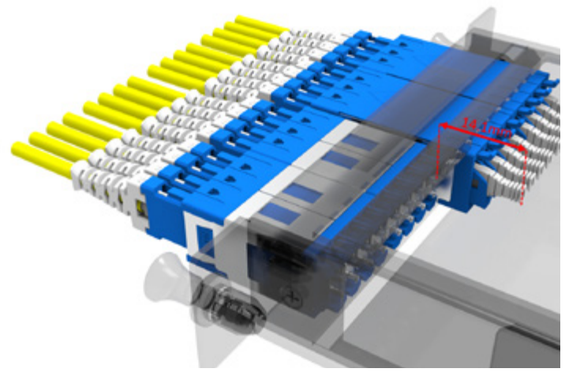
These compact adapters are designed for low-profile modular cassette systems that have little or no space above or below the adapter for fixing elements. It is held in place by the base and top cover of the cassette with sprung clips on the upper and lower face of the adapter. The 3-channel type fits legacy hardware incorporates the SC simplex (LC duplex) cut-out, and the 6-channel version is designed to fit the SC duplex (LC quad) cut-out.



SN® MINI ADAPTER

Most Space-effecient BTW

Maximize packing density and save space all at once with the SN® Mini adapter. Designed to increase the packing density at the front of patch panels whilst significantly reducing the space consumption at the rear of the panel for BTW (Behind The Wall), this small adapter serves a big purpose. In combination with SN® Mini connectors, as much as 14.1mm can be saved compared with standard adapters and connectors, making it the ideal solution for optoelectronic applications.



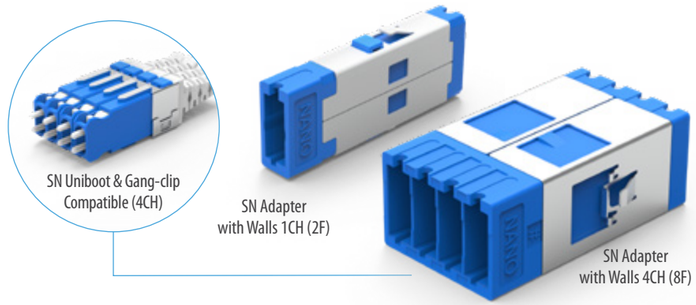
SENKO®
Advanced Components

Sustainability

The density of SN® and SN®-MT connectors allows operators to reduce the number of transceivers, switches, power-consumption, and racks needed to operate their data centers or telecom exchanges.

SENKO®
Advanced Components

SN® ADAPTER
Standard with Walls 1 (2F) and 4-Channel (8F)



SENKO's SN® adapters with walls are available either as a 1-channel (2 fibers) or 4-channel variant (8 fibers). The single channel is designed for applications requiring the separation of individual optical channels such as coherent optics or wave-splitting. The 4-channel version is designed to maximize port density within patch panels.

This adapter is the same size as the shuttered version, and due to its compact size, users can achieve the highest possible density within patch panels and distribution frames. Up to 432 fibers can be presented in a single 1RU (Rack Unit) subject to cable management and connector-access limitations.

All of SENKO's SN® adapters are designed either to be snapped into panel cut-outs or screwed into place using an appropriate bolt and nut. Adapters incorporating an integrated fixing flange will require additional space between each cut-out.

FEATURES

- Premium one-piece body design
- Up to 432 fibers per 1RU (Rack Unit)
- Same the same size as the shuttered version
- Accepts SN® standard and junior connectors
- Supports 200G/400G VSFF connectivity
- Color coded for rapid identification of fiber-type
- Telcordia, ANSI, TIA and IEC Compliant
- Identification marking for fast and simple connector alignment

APPLICATIONS

- High-density patch panels
- Spine/lLeaf architectures
- Switch replication
- Opto-electronic equipment
- WDM equipment
- MUX and DEMUX equipment
- Mass server consolidation EoR, MoR

KEY BENEFITS

Simple connector alignment
Optimum panel packing density

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fixing Method	Snap-fit *(adapter without flange)* or screw and nut *(adapter with flange)*
Housing Material Type	Plastic
Fixing Spring Material Type	Metal stainless steel
Sleeve Material	Zirconia
Dust Protection Method	Removable dust plugs

Optical Data

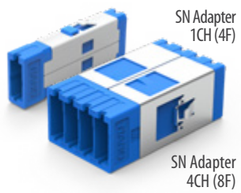
	Value
Typical Insertion Loss (dB)*	0.10
Max. Insertion Loss (dB)*	0.20

* *Based on master grade jumper to low loss random mating test*

Environmental Data

	Value
Operating Temperature	-40°C to +75°C
RoHS Compliance	2015/863 RoHS
REACH Compliance	Yes
Free of Halogen	Yes
Humidity Resistance	95%

ORDERING



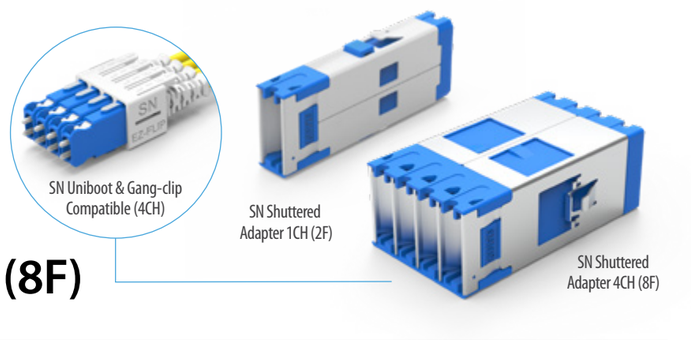
SN FOOTPRINT TYPE		FLANGE		HOUSING COLOR	
691W	SN 1-Channel (2F) with Wall Adapter	1	With Flange	1	Blue (SM PC/UPC)
694W	SN 4-Channel (8F) with Wall Adapter	2	Without Flange	3	Green (SM APC)
		3	Top Mount*	7	Heather Violet (MM OM4)
				9	Aqua (MM OM3)

691 - 17 ORDER CODE example

Note: Adapter supplied with protective dust-cap on both sides
* *Top mount for 694W only*

SENKO®
Advanced Components

SN® ADAPTER
Standard Shuttered 1 (2F) and 4-Channel (8F)



SENKO's SN® shuttered adapters are available either as a 1-channel (2 fibers) or 4-channel variant (8 fibers). The single channel is designed for applications requiring the separation of individual optical channels such as coherent optics or wave-splitting. The 4-channel (8 fibers) version is designed for maximizing port density within patch panels.

This adapter is slightly larger than the non-shuttered version due to the addition of dividing walls that support the integrated shutters. When the connector is inserted into the adapter, the body of the connector (not the ferrule) pushes the shutter open so that the ferrules can be guided into the adapter sleeve.

All of SENKO's SN® adapters are designed either to be snapped into panel cut-outs or screwed into place using an appropriate screw and nut. Adapters incorporating an integrated fixing flange will require additional space between each cut-out.

FEATURES

- Premium one-piece body design
- Maximum density 216CH/432F in 1RU
- Integrated shutter reduces the impact of contaminents
- Accepts SN® standard and junior connectors
- Supports 200G/400G VSFF connectivity
- Color-coded for rapid identification of fiber-type
- Telcordia, ANSI, TIA, and IEC compliant
- Identification marking for fast and simple connector alignment

APPLICATIONS

- High-density patch panels
- Spine/leaf architectures
- High-density cross-connects
- Switch replication
- Opto-electronic equipment
- MUX and DEMUX equipment
- Mass server consolidation EoR, MoR

KEY BENEFITS

- **Integrated shutter**
- **Optimum panel packing density**

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fixing Method	Snap-fit *(adapter without flange)* or screw and nut *(adapter with flange)*
Housing Material Type	Plastic
Shutter Material Type	Metal stainless steel
Sleeve Material	Zirconia
Dust Protection Method	Integrated shutter mechanism *(operated by connector insertion)*

Optical Data

	Value
Typical Insertion Loss (dB)*	0.10
Max. Insertion Loss (dB)*	0.20

** Based on master grade jumper to low loss random mating test*

Environmental Data

	Value
Operating Temperature	-40°C to +75°C
RoHS Compliance	2015/863 RoHS
REACH Compliance	Yes
Free of Halogen	Yes
Humidity Resistance	95%

ORDERING

SN FOOTPRINT TYPE		FLANGE		HOUSING COLOR	
69A	SN 1-Channel (2F) Shuttered Adapter	1	With Flange	1	Blue (SM PC/UPC)
69D	SN 4-Channel (8F) Shuttered Adapter	2	Without Flange	3	Green (SM APC)
		3	Top Mount*	7	Heather Violet (MM OM4)
				9	Aqua (MM OM3)

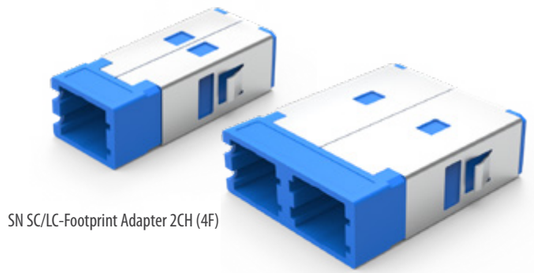
69D - 17 ORDER CODE example

Note: Adapter supplied with protective dust-cap on both sides
** Top mount for 69D only*

SENKO® Advanced Components

SN® ADAPTER

Non-Shuttered SC/LC-Footprint 2 (4F) and 4-Channel (8F)



SN SC/LC-Footprint Adapter 2CH (4F)

SN SC/LC-Footprint Adapter 4CH (8F)

SENKO's SN® SC/LC-footprint non-shuttered adapters are available either as a 2-channel (4 fibers) or 4-channel (8 fibers) variant. The 2-channel type is designed to fit to legacy hardware incorporating an SC simplex (LC duplex) cut-out. The 4-channel version is designed to fit into legacy hardware incorporating the SC duplex (LC quad) cut-out.

These retro-fittable adapters are the ideal choice for cabling providers or equipment manufacturers that want to upgrade their existing systems to SN® hyper-density without redesigning new panels or hardware. Each adapter will double the density of existing LC-based hardware and subsequently reduce the total cost per port of the overall system. Operators can benefit from significantly reduced rack consumption and improve their RU (Rack Unit) revenue-efficiency accordingly.

SC/LC-footprint, non-shuttered adapters can be stacked side-by-side within extended multi-adapter panel cut-outs without consuming additional space beyond the SC/LC footprint size. For example 6x adapters could be place in one elongated slot if necessary.

FEATURES

- Retro-fittable to standard SC/LC panel cut-outs
- Double the patch-panel density of LC
- Accepts SN® standard and junior+ connectors
- Supports 200G/400G VSFF connectivity
- Color coded for rapid Identification of fiber-type
- Telcordia, ANSI, TIA and IEC compliant

APPLICATIONS

- Upgrading existing fiber management hardware from SC/LC to SN®
- Improved rack-space utilization in Brownfield data centers
- High-density centralized cross-connects and patch panels
- Mixed fiber panels combining different connector types

KEY BENEFITS

Retro-fittable to SC/LC cut-outs

Stackable side by side within SC/LC footprint

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fixing Method	Snap-fit *(adapter without flange)* or screw and nut *(adapter with flange)*
Housing Material Type	Plastic
Fixing Spring Material Type	Metal stainless steel
Sleeve Material	Zirconia
Dust Protection Method	Removable dust plugs

Optical Data

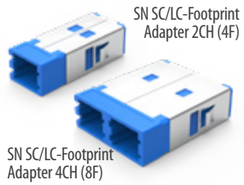
	Value
Typical Insertion Loss (dB)*	0.10
Max. Insertion Loss (dB)*	0.20

* *Based on master grade jumper to low loss random mating test*

Environmental Data

	Value
Operating Temperature	-40°C to +75°C
RoHS Compliance	2015/863 RoHS
REACH Compliance	Yes
Free of Halogen	Yes
Humidity Resistance	95%

ORDERING



SN SC/LC-Footprint Adapter 2CH (4F)

SN SC/LC-Footprint Adapter 4CH (8F)

SC/LC FOOTPRINT TYPE	
672	SN 2-Channel (4F) Adapter
674	SN 4-Channel (8F) Adapter

FLANGE	
1	With Flange
2	Without Flange

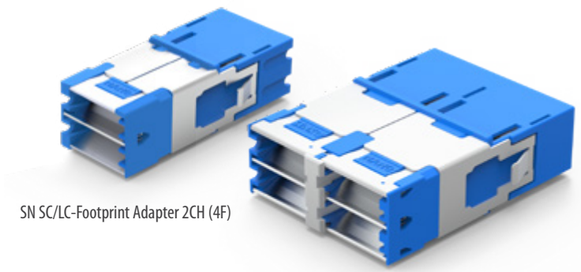
HOUSING COLOR	
1	Blue (SM PC/UPC)
3	Green (SM APC)
7	Heather Violet (MM OM4)
9	Aqua (MM OM3)

672 17 ORDER CODE example

Note: Adapter supplied with protective dust-cap on both sides

SENKO®
Advanced Components

SN® ADAPTER
Shuttered SC/LC-Footprint 2 (4F) and 4-Channel (8F)



SN SC/LC-Footprint Adapter 2CH (4F)

SN SC/LC-Footprint Adapter 4CH (8F)

SENKO's SN® SC/LC-footprint shuttered adapters are available either as a 2-channel (4 fibers) or 4-channel (8 fibers) variant. The 2-channel type is designed to fit to legacy hardware incorporating an SC simplex (LC duplex) cut-out. The 4-channel version is designed to fit into legacy hardware incorporating the SC duplex (LC quad) cut-out.

These retro-fittable adapters are the ideal choice for cabling providers or equipment manufacturers that want to upgrade their existing systems to SN® hyper-density without redesigning new panels or hardware. Each adapter will double the density of existing SC/LC-based systems and subsequently reduce the total cost per port of the overall system. Operators can benefit from significantly reduced rack consumption and improve their RU (Rack Unit) revenue-efficiency accordingly.

FEATURES

- Retro-fittable to standard SC/LC panel cut-outs
- Double the patch-panel density of LC
- Integrated shutter reduces impact of dust and dirt ingress
- Accepts SN® standard and junior+ connectors
- Supports 200G/400G VSFF connectivity
- Color coded for rapid identification of fiber-type
- Telcordia, ANSI, TIA and IEC compliant

APPLICATIONS

- Upgrading existing fiber management hardware from SC/LC to SN®
- Improved rack-space utilization in Brownfield data centers
- High-density centralized cross-connects and patch panels
- Mixed fiber panels combining different connector types

KEY BENEFITS

Integrated shutter
Retro-fittable to SC/LC cut-outs

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fixing Method	Snap-fit *(adapter without flange)* or screw and nut *(adapter with flange)*
Housing Material Type	Plastic
Fixing Spring Material Type	Metal stainless steel
Sleeve Material	Zirconia
Dust Protection Method	Integrated shutter mechanism *(operated by connector insertion)*

Optical Data

	Value
Typical Insertion Loss (dB)*	0.10
Max. Insertion Loss (dB)*	0.20

* *Based on master grade jumper to low loss random mating test*

Environmental Data

	Value
Operating Temperature	-40°C to +75°C
RoHS Compliance	2015/863 RoHS
REACH Compliance	Yes
Free of Halogen	Yes
Humidity Resistance	95%

ORDERING

SN SC/LC-Footprint Shuttered Adapter 2CH (4F)

SN SC/LC-Footprint Shuttered Adapter 4CH (8F)

SC/LC FOOTPRINT TYPE	
67B	SN 2-Channel (4F) Shuttered Adapter
67D	SN 4-Channel (8F) Shuttered Adapter

FLANGE	
1	With Flange
2	Without Flange

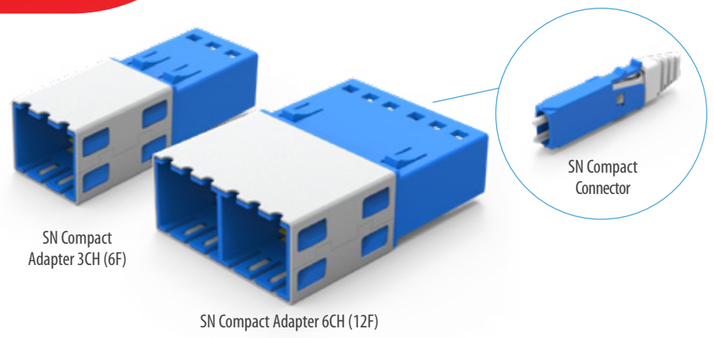
HOUSING COLOR	
1	Blue (SM PC/UPC)
3	Green (SM APC)
7	Heather Violet (MM OM4)
9	Aqua (MM OM3)

67B - 17 ORDER CODE example

Note: Adapter supplied with protective dust-cap on both sides

SENKO®
Advanced Components

SN® ADAPTER
Compact 3 (6F) and 6-Channel (12F)



SN® compact adapters are available either as a 3-channel (6 fibers) or 6-channel variant (12 fibers). The 3-channel type is designed to fit to legacy hardware incorporating the SC simplex (LC duplex) cut-out, and the 6-channel version is designed to fit legacy hardware incorporating the SC duplex (LC quad) cut-out.

These compact adapters are designed to be placed side by side in low-profile modular cassette systems that have little or no space above or below the adapter for fixing elements. The compact adapter is held in place by the base and top cover of the cassette, and therefore spring clips are placed on the upper and lower face of the adapter. The BTW (Behind The Wall) side of the adapter is lower in height than the front of the adapter to compensate for the material wall thickness of the cassette.

To achieve this reduced adapter height on the inside of the cassette, SENKO has designed the complimentary SN® compact connector which is an essential component when integrating this adapter into your system.

FEATURES

- Triple the patch-panel density of LC
- Designed for lowest profile modular cassette systems
- Accepts SN® compact connector (BTW side) and SN® standard connector (front side)
- Supports 200G/400G VSFF connectivity
- Color coded for rapid identification of fiber-type
- 3-channel and 6-channel variants available
- Telcordia, ANSI, TIA and IEC compliant

APPLICATIONS

- 1RU chassis with 3x rows of adapters
- Spine/leaf architectures within hyperscale data centers
- Modular low-profile fiber optic cassette systems
- Spine/leaf architectures within hyperscale data centers
- High-density centralized cross-connects
- Mass server consolidation EoR, MoR

KEY BENEFITS

- **Suitable for low-profile cassettes**
- **Side by side stacking of adapters**

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fixing Method	Snap-fit
Housing Material Type	Plastic
Fixing Spring Material Type	Integrated plastic spring clips
Sleeve Material	Zirconia
Dust Protection Method	Removable dust pPlugs

Optical Data

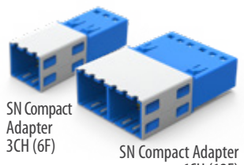
	Value
Typical Insertion Loss (dB)*	0.10
Max. Insertion Loss (dB)*	0.20

** Based on master grade jumper to low loss random mating test*

Environmental Data

	Value
Operating Temperature	-40°C to +75°C
RoHS Compliance	2015/863 RoHS
REACH Compliance	Yes
Free of Halogen	Yes
Humidity Resistance	95%

ORDERING



SN FOOTPRINT TYPE	
693	SN 3-Channel (6F) Non-Shuttered Adapter
696	SN 6-Channel (12F) Non-Shuttered Adapter

FLANGE TYPE	
3	Top Mount

HOUSING COLOR	
1	Blue (SM PC/UPC)
3	Green (SM APC)
7	Heather Violet (MM OM4)
9	Aqua (MM OM3)

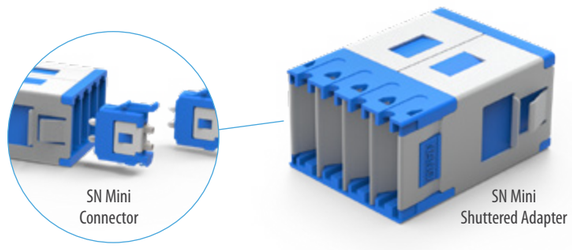
693 - **37** ORDER CODE example

Note: Adapter supplied with protective dust-cap on both sides

SENKO Advanced Components

SN® MINI ADAPTER

Shuttered
SN-Footprint
4-Channel (8F)



SENKO's SN® Mini, shuttered, 4-channel (8 fibers) adapters are designed to offer maximum packing density at the front of patch panels while significantly reducing the space consumption at the rear of the panel for BTW (Behind The Wall) connectivity. In combination with SN® Mini connectors, as much as 14.1mm can be saved compared with standard adapters and connectors, making it the ideal solution for opto-electronic applications requiring circuit boards or other vital components to share the same space as fiber the optic connectivity. The SN® Mini adapter incorporates integrated dust shutters on the front side to prevent unwanted contaminants entering the adapter during operation. When the connector is patched to the adapter, the body of the connector (not the ferrule) pushes the shutter open allowing the ferrules to be guided into the adapter sleeve.

All of SENKO's SN® adapters are designed either to be snapped into panel cut-outs or screwed into place. Adapters incorporating an integrated fixing flange will require additional space between each cut-out and the maximum density per 1 RU (Rack Unit) will be lower.

FEATURES

- Up to 70% BTW space saving compared with standard adapters and connectors
- Maximum density 216CH/432F in 1RU
- Integrated shutter reduces impact of dust and dirt ingress
- Accepts SN® standard and Mini connectors
- Supports 200G/400G VSFF connectivity
- Color coded for rapid Identification of fiber-type
- Telcordia, ANSI, TIA and IEC compliant
- Identification marking for fast and simple connector alignment

APPLICATIONS

- Customized opto-electronic equipment
- Highest packing density within patch panels
- Spine/Leaf architectures within hyperscale data centers
- High-density switch replication
- High-density centralized cross-connects
- Mass server consolidation EoR, MoR

KEY BENEFITS

Integrated dust shutter
Maximum BTW space

Mechanical Data

	Value
Durability	500 matings per TIA-568
Fixing Method	Snap-fit
Housing Material Type	Plastic
Shutter Material Type	Metal stainless steel
Sleeve Material	Zirconia
Dust Protection Method	Integrated shutter mechanism *(operated by connector insertion)*

Optical Data

	Value
Typical Insertion Loss (dB)*	0.10
Max. Insertion Loss (dB)*	0.20

* *Based on master grade jumper to low loss random mating test*

Environmental Data

	Value
Operating Temperature	-40°C to +75°C
RoHS Compliance	2015/863 RoHS
REACH Compliance	Yes
Free of Halogen	Yes
Humidity Resistance	95%

ORDERING

SN FOOTPRINT TYPE		FLANGE TYPE		HOUSING COLOR	
6MD	SN 4-Channel (8F) Mini Shuttered Adapter	1	With Flange	1	Blue (SM PC/UPC)
		2	Without Flange	3	Green (SM APC)
				7	Heather Violet (MM OM4)
				9	Aqua (MM OM3)

6MD - 27 ORDER CODE example

Note: Adapter supplied with protective dust-cap on both sides

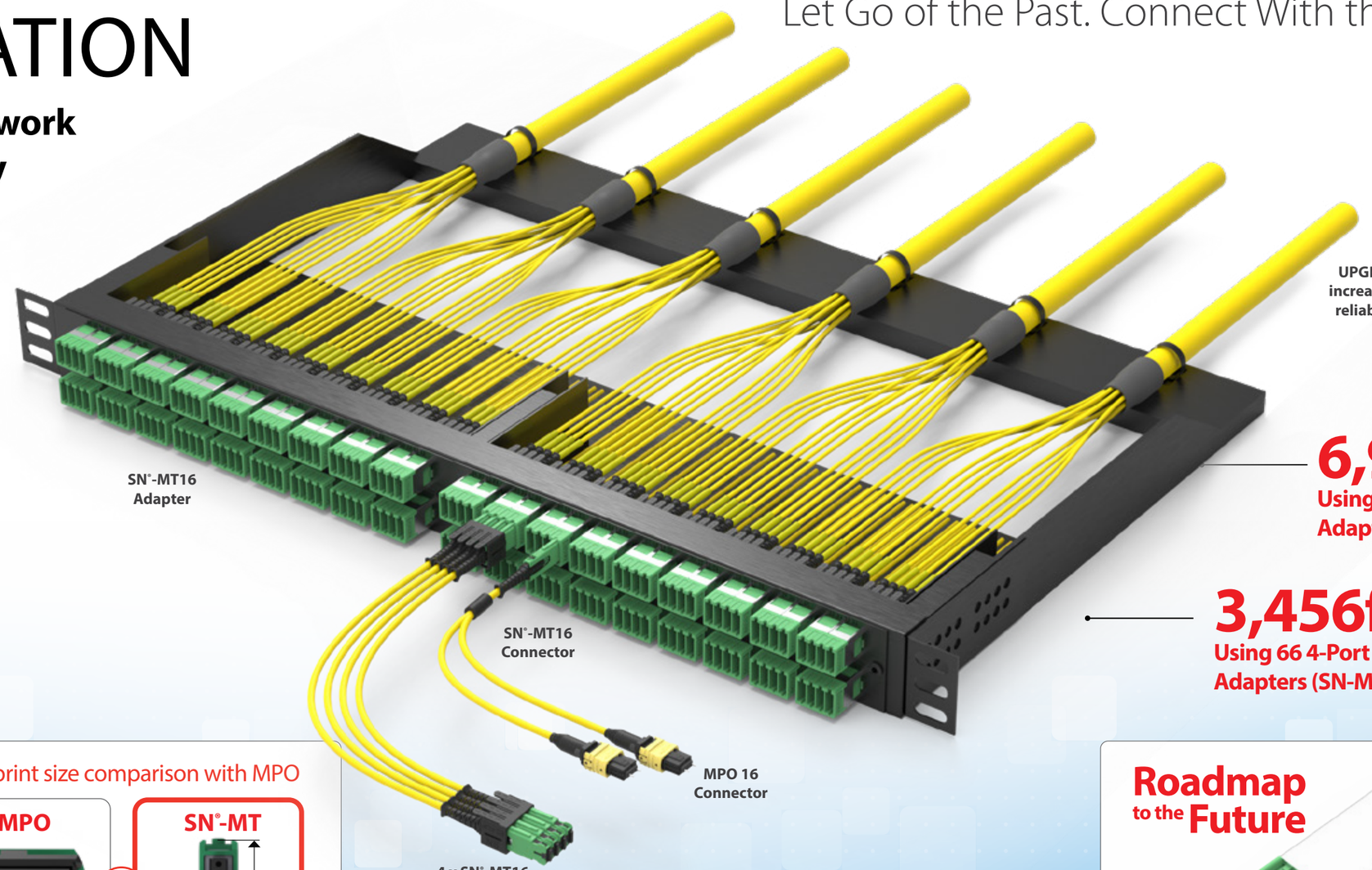
SENKO®
Advanced Components

HYPERSCALE DENSIFICATION

Future-proof your network with the SN®-MT Family

SN®-MT can be used in high-density patch panels to connect legacy MPO-based transceivers today, and then in the future, they can be redeployed to connect next-generation transceivers using the SN®-MT interface.

Let Go of the Past. Connect With the Now.



UPGRADE CABLE SYSTEMS increase density and improve reliability with best-in-class performance

6,912f
Using 66 4-Port Adapters (SN-MT32)

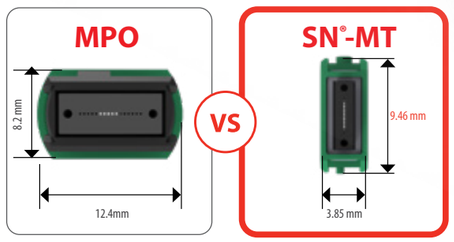
3,456f
Using 66 4-Port Adapters (SN-MT16)

2.7x Density Increase Compared to MPO-16F

HYPER DENSE

Same Footprint As SN® Connector

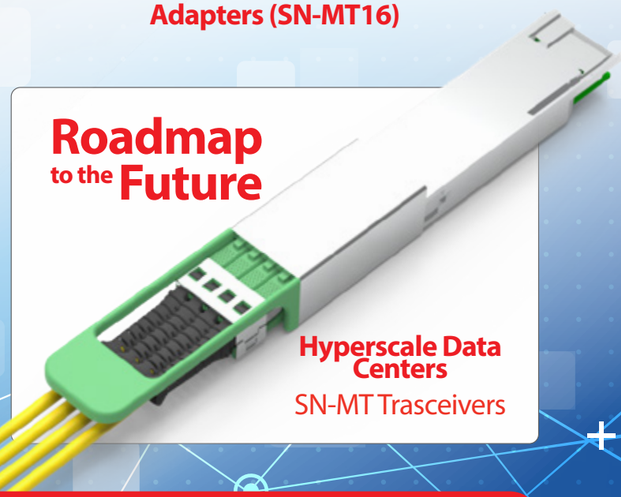
Footprint size comparison with MPO



1 x SN-MT (16-fibers)

SCALEABLE
Up to 1.6 TB

Roadmap to the Future

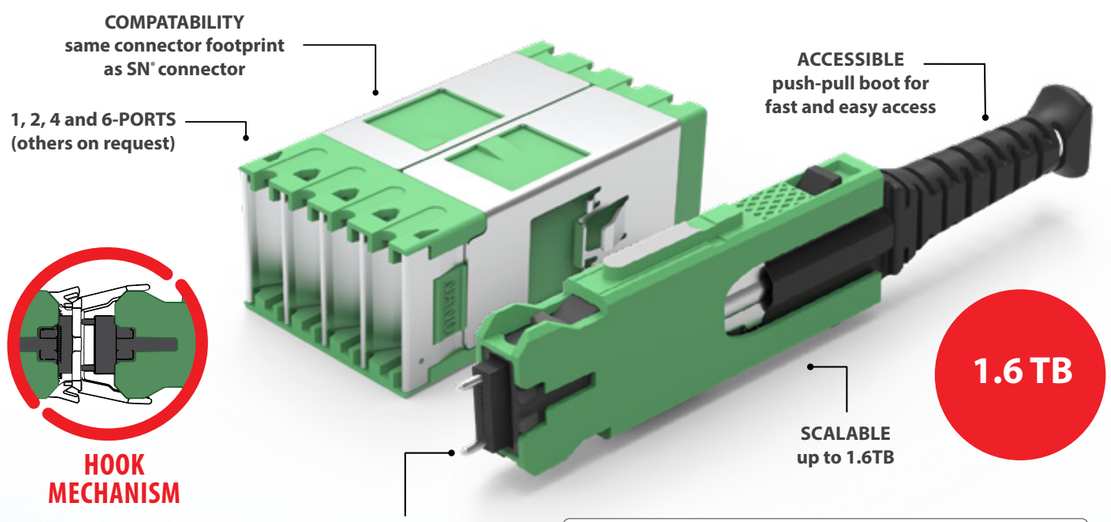


Hyperscale Data Centers
SN-MT Trasceivers

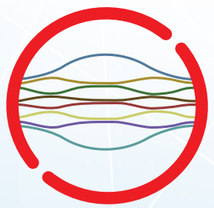
SN®-MT SERIES

SENKO Products are RoHS, Reach SVHC and UL 94 V-0 compliant.

Connect with the now - the journey to 1.6TB has already begun



HOOK MECHANISM



ROLLABLE RIBBON COMPATIBLE

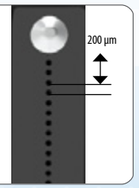
6,912 FIBERS PER 1RU

SN-MT OVERVIEW

12 x 250 µm in a Single Row

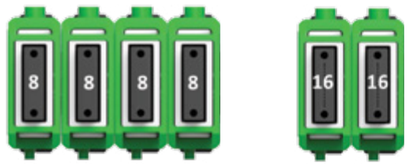
16 x 200 µm in a Single Row

Introducing the industry's highest density connector featuring up to 16 fibers in a single row. 2.7x denser than the MPO-16F



SN®-MT8/16 Multi-Port

4x 400G DR4 **2x 800G DR8**



SENKO® Advanced Components

SENKO's SN®-MT for Hyperscale Density

SN®-MT CONNECTOR
Standard

Standard SN®-MT connector for patch cord assemblies and breakouts

- SN-MT Connector pg. 66

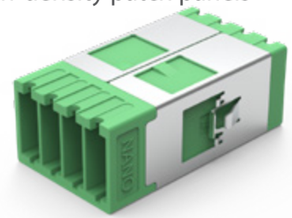
SN®-MT RIBBON CONNECTOR

Standard SN®-MT ribbon connector for patch cord assemblies and breakouts

- SN-MT Standard Ribbon Connector pg. 66

SN®-MT ADAPTER
Non-Shuttered

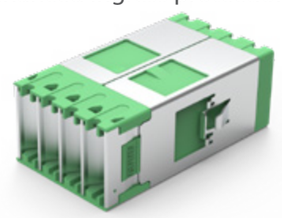
Standard 1, 2, 4 and 6-port adapters for high-density patch panels



- SN-MT Non-Shuttered Adapter pg. 78

SN®-MT ADAPTER
Shuttered

Shuttered 1, 2, 4 and 6-port adapters for enhanced ingress protection

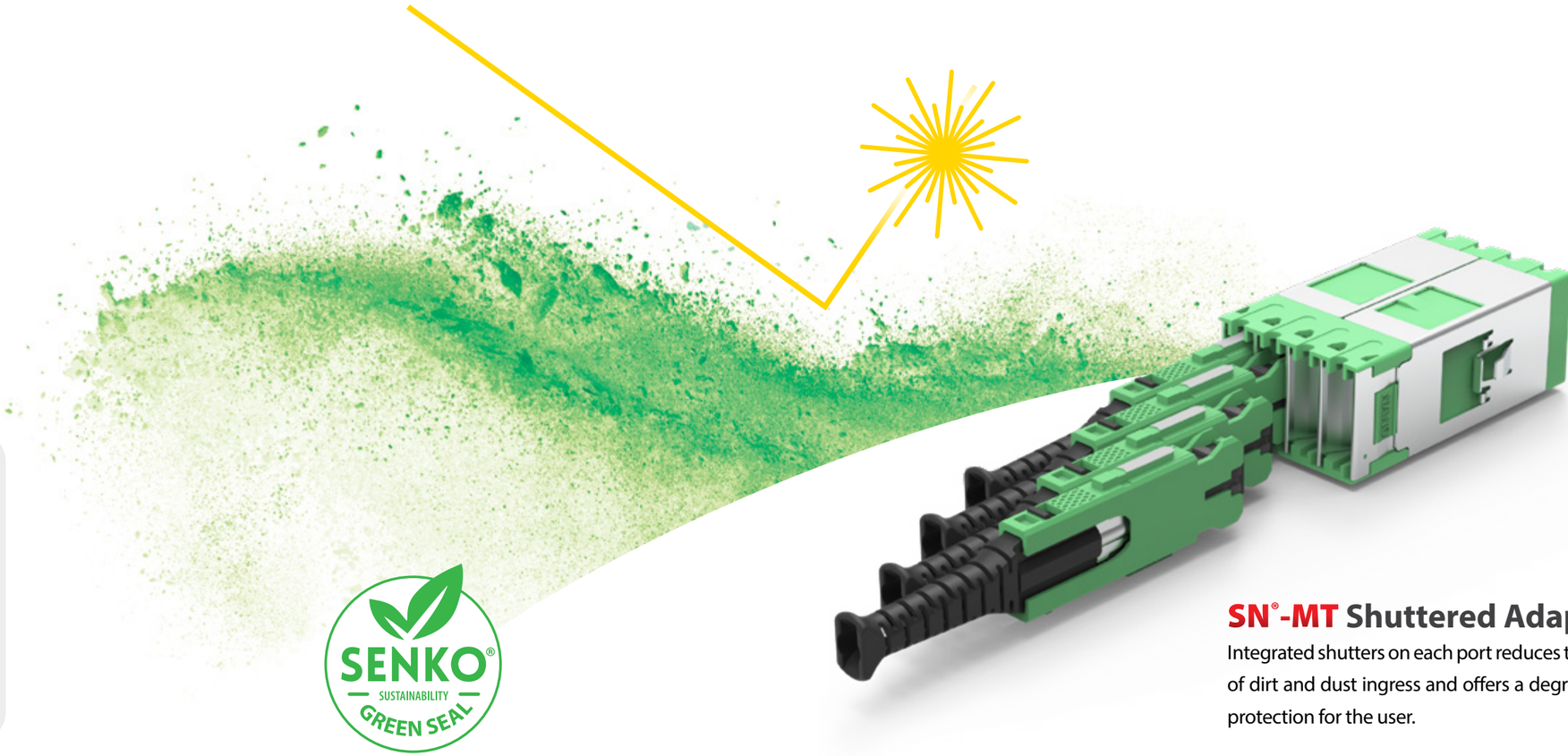


- SN-MT Shuttered Adapter pg. 80

FEATURED BENEFITS

Turn down the heat

Improve air flow to equipment and reduce energy consumption with SN® and SN®-MT



SENKO® SUSTAINABILITY GREEN SEAL

SN®-MT Shuttered Adapters

Integrated shutters on each port reduces the impact of dirt and dust ingress and offers a degree of laser protection for the user.

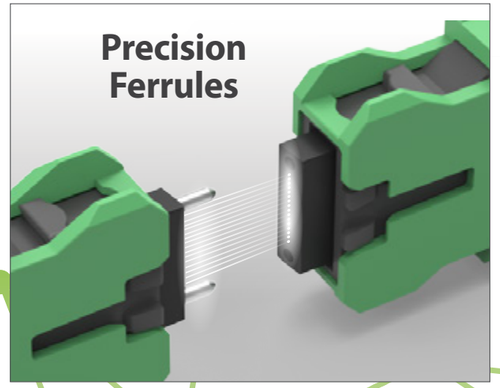
SUSTAINABLE NETWORKS

Increased efficiency, less waste

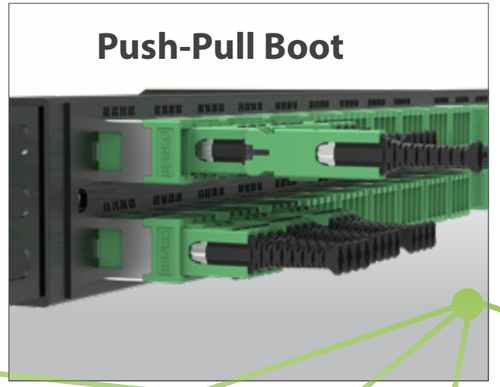
67% Reduction in plastic

SN® and SN®-MT connectors are less than half the size of an LC duplex connector

Precision Ferrules



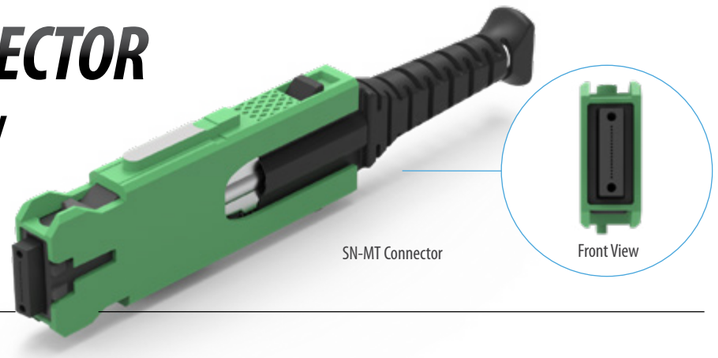
Push-Pull Boot



SENKO®
Advanced Components

SN®-MT CONNECTOR

16-Fiber, Single Row
32-Fiber, Dual Row
200um



SENKO's SN®-MT is an extension of the SN® range and incorporates a single, compact SN®-MT ferrule ith the option of 16 x 200 µm fibers in a single row or 32 x 200 µm fibers in dual rows. Subsequently, the SN®-MT ferrule can achieve 2.7 times the density of MPO32 whilst leveraging the same proven alignment methods. This combination ensures low-loss performance for singlemode and multimode APC applications whilst delivering optimized patch-panel density required in today's Hyperscale data centers.

The SN®-MT further increases the density capabilities of the SN® family by providing a patch panel density of 6,912 fibers per 1RU. This is as much as 3 x the density of MPO16 connectors occupying the same rack space. Additionally, the SN®-MT is compatible with next-generation 200 µm 'rollable ribbon' cables that significantly reduce the cable congestion within cable pathways and trunks. The SN®-MT connector is also suitable for ganged installations where as many as four connectors can be patched simultaneously to a 4-port adapter. This function converts the connector from a 16F connector to a 64F connector and makes it ideal for high-density trunk applications.

FEATURES

- Compatible with 200 µm rollable ribbon cables
- Allows up to 6,912 fibers per 1RU with SN-MT32
- Low-loss, compact SN-MT ferrule
- 2.7 x denser than MPO32 per 1RU
- Max. insertion loss 0.35 dB
- Push-pull boot for fast and simple MACs
- Optimized for 800G/1.6Tb data rates with QSFP-DD, OSFP and SFP-DD transceivers
- Up to 4 x SN®-MT connectors per transceiver
- Wide range of connector and adapter types for legacy upgrades or greenfield applications

APPLICATIONS

- High-density trunks and patching
- Co-packaged optics
- High-density, high-data rate switches
- AI and super-compute clusters
- QSFP-DD and OSFP transceiver links
- Hyperscale, edge, enterprise and colocation data centers

KEY BENEFITS

- **2.7 x denser than MPO**
- **Future-proofed for next-gen data rates**

Mechanical Data

	Value
Durability	50 matings per GR-1435-Core
Fiber Count	Multi-fiber *(16 or 32 Fibers)*
Cable Suitablity	2.0 mm and 2.6 mm jacketed *(16 Fibers)* 3.0 mm jacketed *(32 Fibers)*
Ferrule Material	Polymer
Dust Protection Method	Removable dust plugs that encapsulate the ferrules

Optical Data

	Singlemode
	APC
	SM Super Low Loss
Typical Insertion Loss (dB)*	0.15
Max. Insertion Loss (dB)*	0.35
Typical Return Loss (dB)*	≥60
Ferrule Diameter (µm)	SN-MT ferrule 16-fiber, 200 µm in a single row SN-MT ferrule 32-fiber, 200 µm in dual rows

** Specifications provided are target only based on master grade jumper to low loss random mating test*

ORDERING

SN-MT SM Connector
APC for up to 2 mm Cable

CONNECTOR TYPE	GUIDE PIN GENDER	PERFORMANCE	FIBER COUNT	HOUSING COLOR	BOOT TYPE	BOOT COLOR
641 SN-MT Connector with Ferrule	**F** Female *(Without Pin)* **M** Male *(With Pin)*	**SL** SM Super Low Loss	**16** 16 Fiber (200 µm)	**G** SM Green	**1** Bare Ribbon Fiber Boot **4** 50mm Boot (50T), 2 mm	**3** Black

SN-MT SM Connector
APC for >2 mm Cable

CONNECTOR TYPE	GUIDE PIN GENDER	PERFORMANCE	FIBER COUNT	HOUSING COLOR	BOOT TYPE	BOOT COLOR
642 SN-MT Connector with Ferrule	**F** Female *(Without Pin)* **M** Male *(With Pin)*	**SL** SM Super Low Loss	**16** 16 Fiber (200 µm) **32** 32 Fiber (200 µm)	**G** SM Green	**2** 44mm Boot (44T), 2.6 mm **3** 46 mm Boot (46T), 3.0 mm	**3** Black

Note: Connector supplied with protective dust-cap

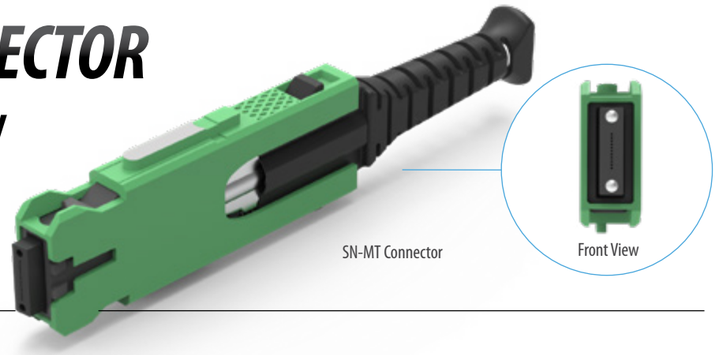
Contact SENKO

Contact sales@senko.com for availability and to learn more

SENKO®
Advanced Components

SN®-MT CONNECTOR

12-Fiber, Single Row
24-Fiber, Dual Row
250 µm



SENKO's SN®-MT is an extension of the SN® range and incorporates a single, compact SN®-MT ferrule with the option of 12 x 250 µm fibers in a single row or 24 x 250 µm fibers in a dual row to support widely deployed 250µm jacketed and bare ribbon fiber installations. Subsequently, the SN®-MT ferrule can achieve 2.7 times the density of MPO24 whilst leveraging the same proven alignment methods. This combination ensures low-loss performance for singlemode and multimode APC applications whilst delivering optimized patch-panel density required in today's Hyperscale data centers.

The SN®-MT connector is suitable for ganged installations where as many as four connectors can be patched simultaneously to a 4-port adapter. This function converts the connector from a 16F connector to a 64F connector and makes it ideal for high-density trunk applications.

FEATURES

- Low-loss, compact SN®-MT ferrule
- 2.7 x denser than MPO24 per 1R
- Max. insertion loss 0.35 dB
- Push-pull boot for fast and simple MACs
- Optimized for 800G data rates with QSFP-DD, OSFP and SFP-DD transceivers
- Up to 4 x SN®-MT connectors per transceiver
- Wide range of connector and adapter types for legacy upgrades or greenfield applications

APPLICATIONS

- High-density trunks and patching
- Co-packaged optics
- High-density, high-data rate switches
- AI and super-compute clusters
- QSFP-DD and OSFP transceiver links
- Hyperscale, edge, enterprise and colocation data centers

KEY BENEFITS

- **2.7 x denser than MPO**
- **Future-proofed for next-gen data rates**

Mechanical Data

	Value
Durability	50 matings per GR-1435-Core
Fiber Count	Multi-fiber *(12 or 24 Fibers)*
Cable Suitablity	2.0 mm and 2.6 mm jacketed *(12 Fibers)* 3.0 mm jacketed *(24 Fibers)*
Ferrule Material	Polymer
Dust Protection Method	Removable dust plugs that encapsulate the ferrules

Optical Data

	Singlemode	Multimode
	APC	MM (APC)
	SM Super Low Loss	MM Super Low Loss
Typical Insertion Loss (dB)*	0.15	0.15
Max. Insertion Loss (dB)*	0.35	0.35
Typical Return Loss (dB)*	≥60	≥45
Ferrule Diameter (µm)	SN-MT ferrule 12-fiber, 250 µm in a single row SN-MT ferrule 24-fiber, 250 µm in dual rows	

** Specifications provided are target only based on master grade jumper to low loss random mating test*

ORDERING

SN-MT SM Connector
APC for up to 2 mm Cable

CONNECTOR TYPE	GUIDE PIN GENDER	PERFORMANCE	FIBER COUNT	HOUSING COLOR	BOOT TYPE	BOOT COLOR
641 SN-MT Connector with Ferrule	F Female *(Without Pin)* M Male *(With Pin)*	SL SM Super Low Loss	12 12 Fiber (250 µm)	G SM Green	1 Bare Ribbon Fiber Boot 4 50mm Boot (50T), 2 mm	3 Black

SN-MT SM Connector
APC for >2 mm Cable

CONNECTOR TYPE	GUIDE PIN GENDER	PERFORMANCE	FIBER COUNT	HOUSING COLOR	BOOT TYPE	BOOT COLOR
642 SN-MT Connector with Ferrule	F Female *(Without Pin)* M Male *(With Pin)*	SL SM Super Low Loss	12 12 Fiber (250 µm) 24 24 Fiber (250 µm)	G SM Green	2 44mm Boot (44T), 2.6 mm 3 46mm Boot (46T), 3.0 mm	3 Black

SN-MT MM Connector
APC for up to 2 mm Cable

CONNECTOR TYPE	GUIDE PIN GENDER	PERFORMANCE	FIBER COUNT	HOUSING COLOR	BOOT TYPE	BOOT COLOR
641 SN-MT Connector with Ferrule	F Female *(Without Pin)* M Male *(With Pin)*	ML MM Low Loss	12 12 Fiber (250 µm)	B MM Black	1 Bare Ribbon Fiber Boot 4 50 mm Boot (50T), 2 mm	3 Black

Note: 1. Connector supplied with protective dust cap
2. 24 Fiber version in development

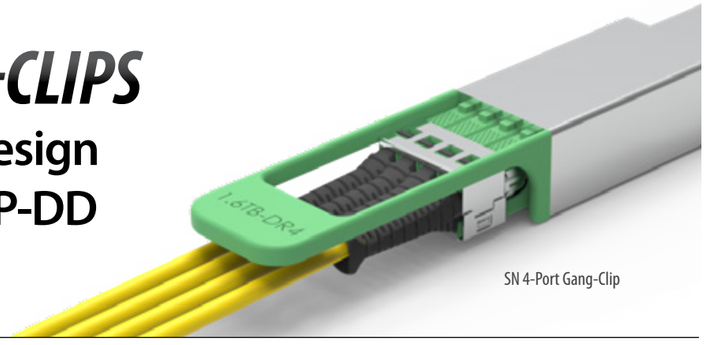
Contact SENKO

Contact sales@senko.com for availability and to learn more

SENKO Advanced Components

SN®-MT GANG-CLIPS

Quad and Duplex Design for QSFP-DD and SFP-DD Transceivers



SN 4-Port Gang-Clip

SENKO's SN®-MT Gang-clips are designed to hold two or four individual SN®-MT connectors side by side so they can be plugged into either 4-port QSFP-DD, OSFP or 2-port SFP-DD transceivers simultaneously. This speeds up the patching time and simplifies the process of patching multiple connectors - it also allows the four duplex connectors to act as a single Base-4 or Base-8 connector.

The Gang-clip is generally deployed in transceiver breakout applications where, for example, a single 400G transceiver is broken out to 4 x 100G transceivers within spine-leaf architectures.

FEATURES

- Allows multiple SN®-MT connectors to be patched simultaneously
- The compact design prevents interference with transceiver pull-tab
- Suitable for QSFP-DD, OSFP and SFP-DD transceivers

APPLICATIONS

- Transceiver breakout applications
- Spine-leaf architectures
- Hyperscale data centers
- Patching to standard SN®-MT non-shuttered adapters

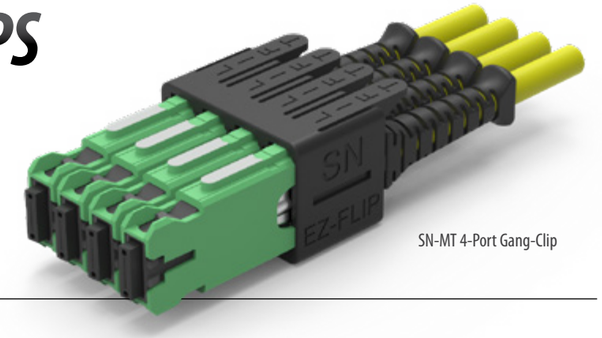
ORDERING

PART NUMBER	
602-CLIP-QD-01	Metal Quad Gang-clip for QSFP-DD and OSFP Transceiver Types
602-CLIP-DX-02	Metal Duplex Gang-clip for SFP-DD Transceiver Types

602-CLIP-DX-02 ORDER CODE example

SN®-MT GANG-CLIPS

Quad Design for 4-Port Shuttered Adapters



SN-MT 4-Port Gang-Clip

SENKO's SN®-MT Gang-clips are designed to hold four individual SN®-MT connectors side by side so they can be plugged into shuttered adapters (or adapters with walls between each channel) simultaneously. This unique functionality dramatically reduces the installation time required to patch multiple connectors to high-density patch panels, as well as allowing the four SN®-MT connectors to act as one Base-64 connector (subject to connector-fiber count).

The Gang-clip can be used to combine four individual connectors from SN®-MT cords or alternatively, four connectors from a breakout cable or fanout cable. The Gang-clip is a critical solution in applications where multiple connectors are being patched to the rear side of patch panels. Individual SN®-MT connectors can be inserted or removed from the 4-port gang-clip thanks to flexible locking clips located on the upper face of the clip.

FEATURES

- Allows multiple SN®-MT connectors to be patched simultaneously
- Connectors can be individually inserted and removed without disruption to adjacent connectors
- Compact design
- Suitable for shuttered 4-channel SN®-MT adapters

APPLICATIONS

- Spine-Leaf switch connections
- Patch cord consolidation
- Breakout and fanout cable assemblies
- High fiber-count backbone trunks
- Hyperscale data centers

ORDERING

Plastic Quad Gang-Clip SN-MT Connector

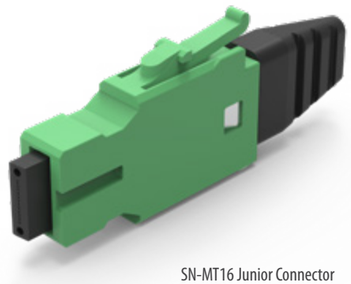
PART NUMBER	
641-CLIP-QD-02	Plastic Quad Gang-clip for Shuttered Adapters or Adapters with Walls Between Each Port - Color Black

641-CLIP-QD-02 ORDER CODE example

SENKO®
Advanced Components

SN®-MT JUNIOR CONNECTOR

16 and 32-Fiber, 200 µm
12 and 24-Fiber, 250 µm
BTW (Behind The Wall)



SN-MT16 Junior Connector

The SN®-MT Junior connector is designed for applications that require less space consumption BTW (Behind The Wall) than conventional cable-based connectors. With a much shorter body length and boot length than conventional connectors, the SN®-MT Junior offers users the chance to reduce the depth of cassettes and modules as well as free up valuable space within fiber management panels for additional hardware such as coherent devices or electronic equipment.

The SN®-MT Junior connector has a latch on the upper side of the connector that provides an audible click when it is plugged into an adapter. At the rear of the connector is a boot that will accept 16-fiber ribbon with a 200 µm construction. Junior connectors are most commonly used for applications such as high fiber-count ribbon splicing or optoelectronic applications where additional space is required BTW.

The SN®-MT Junior connector is compatible with standard SN®-MT adapters.

FEATURES

- Compatible with 200 µm/ 250 µm rollable ribbon cables
- Upper latch mechanism with an audible click
- Reduced connector/boot length
- Low-loss, compact SN-MT ferrule
- 2.7 x denser than MPO per 1RU
- Max. Insertion loss 0.35 dB
- No special adapter required

APPLICATIONS

- High-density ribbon splicing
- Pre-terminated fiber-management
- Co-packaged optics
- Coherent optics
- Optoelectronic equipment panels

KEY BENEFITS

2.7 x denser than MPO
High fiber-count ribbon splicing

Mechanical Data

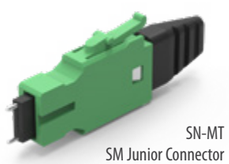
	Value
Durability	50 matings per GR-1435-Core
Fiber Count	Multi-fiber *(12, 16, 24 or 32 Fibers)*
Cable Suitablity	16/32-fiber, 200 µm 12/24-fiber, 250 µm ribbon
Ferrule Material	Polymer
Dust Protection Method	Removable dust plugs that encapsulate the ferrules

Optical Data

	Singlemode	Multimode
	APC	MM (APC)
	SM Super Low Loss	MM Super Low Loss
Typical Insertion Loss (dB)*	0.15	0.15
Max. Insertion Loss (dB)*	0.35	0.35
Typical Return Loss (dB)*	≥60	≥45
Ferrule Diameter (µm)	SN-MT ferrule 16-fiber, 200 µm in a single row SN-MT ferrule 32-fiber, 200 µm in dual rows SN-MT ferrule 12-fiber, 250 µm in a single row SN-MT ferrule 24-fiber, 250 µm in dual rows	

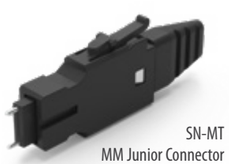
** Specifications provided are target only based on master grade jumper to low loss random mating test*

ORDERING



SN-MT
SM Junior Connector
APC for 16-fiber 200 µm ribbon

CONNECTOR TYPE	GUIDE PIN GENDER	PERFORMANCE	FIBER COUNT	HOUSING COLOR	BOOT TYPE	BOOT COLOR
643 SN-MT Junior Connector with Ferrule	F Female *(Without Pin)* M Male *(With Pin)*	SL SM Super Low Loss	12 12 Fiber (250 µm) 16 16 Fiber (200 µm) 24 24 Fiber (250 µm) 32 32 Fiber (200 µm)	G SM Green	1 Bare Ribbon Fiber Boot	3 Black



SN-MT
MM Junior Connector
APC for 16-fiber 200 µm ribbon

CONNECTOR TYPE	GUIDE PIN GENDER	PERFORMANCE	FIBER COUNT	HOUSING COLOR	BOOT TYPE	BOOT COLOR
643 SN-MT Junior Connector with Ferrule	F Female *(Without Pin)* M Male *(With Pin)*	ML MM Low Loss	12 12 Fiber (250 µm)	B MM Black	1 Bare Ribbon Fiber Boot	3 Black

Note: 1. Connector supplied with protective dust cap
2. 24 Fiber version in development

Contact sales@senko.com for availability and to learn more

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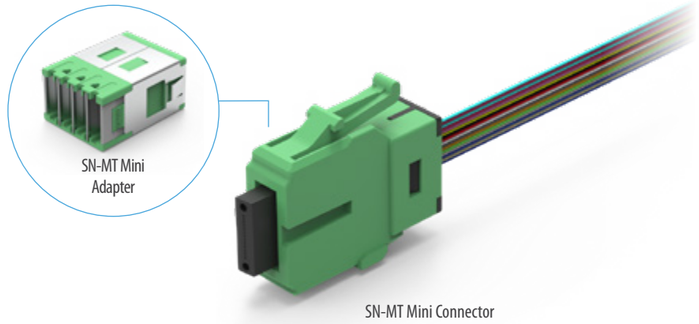
SN®-MT MINI CONNECTOR

16 and 32-Fiber, 200 µm
12-Fiber, 250 µm
BTW (Behind The Wall)



SN-MT Mini Connector

The SN®-MT Mini connector is the shortest in the SN®-MT family and offers users the most space-efficient solution for applications demanding optimized BTW (Behind The Wall) space-saving. In combination with SN® Mini adapters, as much as 14.1mm can be saved compared with standard adapters and connectors, making it the ideal solution for optoelectronic applications requiring circuit boards or other vital components to share the same space as fiber optic connectivity.

The SN®-MT Mini connector has a latch on the upper side of the connector that provides an audible click when it is plugged into an adapter. At the rear of the connector is a boot that will accept 16F, 32F, and 12F ribbon fiber. Mini connectors are most commonly used for applications such as high fiber-count ribbon splicing or optoelectronic applications where additional space is required BTW.

The SN®-MT Mini connector is only compatible with SN®-MT Mini adapters.

FEATURES

- Compatible with 200/250 µm rollable ribbon fiber
- Upper latch mechanism with an audible click
- Reduced connector/boot length
- Low-loss, compact SN®-MT ferrule
- 2.7x denser than MPO per 1RU
- Max. insertion loss 0.35dB for SM

APPLICATIONS

- High-density ribbon splicing
- Pre-terminated fiber-management
- Co-packaged optics
- Coherent optics
- Optoelectronic equipment panels

KEY BENEFITS

2.7 x denser than MPO
High fiber-count ribbon splicing

Mechanical Data

	Value
Durability	50 matings per GR-1435-Core
Fiber Count	Multi-fiber *(12,16, 32 fibers)*
Cable Suitablity	16/32-fiber, 200 µm or 12-fiber, 250 µm ribbon
Ferrule Material	Polymer
Dust Protection Method	Removable dust plugs that encapsulate the ferrules

Optical Data

	Singlemode	Multimode
	APC	MM (APC)
	SM Super Low Loss	MM Super Low Loss
Typical Insertion Loss (dB)*	0.15	0.15
Max. Insertion Loss (dB)*	0.35	0.35
Typical Return Loss (dB)*	≥60	≥45
Ferrule Diameter (µm)	SN-MT ferrule 16-fiber, 200 µm in a single row SN-MT ferrule 32-fiber, 200 µm in dual rows SN-MT ferrule 12-fiber, 250 µm in a single row	

** Specifications provided are target only based on master grade jumper to low loss random mating test*

ORDERING

SN-MT
SM Mini Connector
APC for 16-fiber 200 µm Rbbon

CONNECTOR TYPE	GUIDE PIN GENDER	PERFORMANCE	FIBER COUNT	HOUSING COLOR	CABLE TYPE	BOOT COLOR
647 SN-MT Mini Connector with Ferrule	F Female *(Without Pin)* M Male *(With Pin)*	SL SM Super Low Loss	12 12 Fiber (250 µm) 16 16 Fiber (200 µm) 24 24 Fiber (250 µm) 32 32 Fiber (200 µm)	G SM Green	1 Ribbon Fiber Cable 3 3.0 mm Fiber Cable	0 No Boot

SN-MT
MM Mini Connector
APC for 12-fiber 250 µm Ribbon

CONNECTOR TYPE	GUIDE PIN GENDER	PERFORMANCE	FIBER COUNT	HOUSING COLOR	CABLE TYPE	BOOT COLOR
647 SN-MT Mini Connector with Ferrule	F Female *(Without Pin)* M Male *(With Pin)*	ML MM Low Loss	12 12 Fiber (250 µm)	B MM Black	1 Ribbon Fiber Cable	0 No Boot

Note: Connector supplied with protective dust-cap

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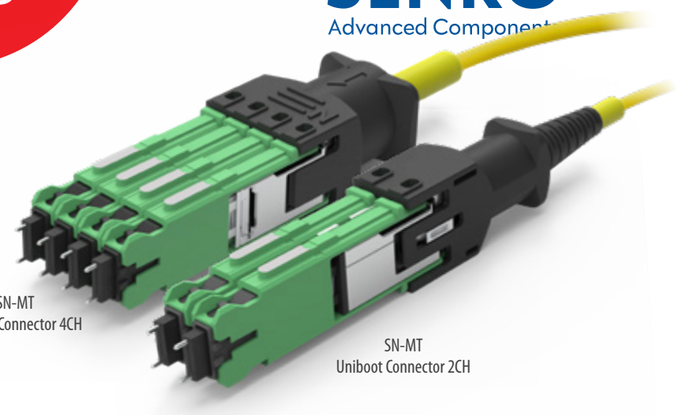
SN®-MT UNIBOOT CONNECTOR

16 and 32-Fiber, 200 µm
12 and 24-Fiber, 250 µm



SN-MT
Uniboot Connector 4CH

SN-MT
Uniboot Connector 2CH

The SN®-MT Uniboot is a pioneering connector that combines two or four individual SN®-MT connectors into one single housing and boot so that all connectors can be plugged into high-density patch panels or transceivers simultaneously. This approach of 'ganging' multiple connectors together reduces the installation time and associated cable clutter that accumulates at the rear of high-density patch panels. A standard 1RU patch panel with a recommended maximum density of 216 SN®-MT ports per 1RU can be reduced to 54 connectors and cables with the SN®-MT Uniboot connector.

In terms of panel density, the SN-MT Uniboot is an essential component in achieving hyperscale density without compromising practicality and user-friendliness. The SN®-MT Uniboot offers an unparalleled density of 6,912 fibers per 1RU which is significantly higher than that achievable with the MPO connector

The SN®-MT Connector offers an ultra-low insertion loss of less than 0.35 dB per mated connector pair, guaranteeing repeatable and reliable links. Its high-performance MT ferrules and alignment pins further improve reliability, ensuring stable connections and optimal network performance.

FEATURES

- Patch up to 128 fibers simultaneously
- Low insertion loss at 0.35dB per connector
- Compatible with 200 µm/ 250 µm rollable ribbon
- Push-pull Uniboot for fastest deployment
- 32F allows up to 6,912 fibers per 1RU (Rack Unit)
- Significantly lower total cost of ownership
- Simplified cable management and reduced cable clutter

APPLICATIONS

- High-density backbone cabling
- Spine/leaf and super-spine patching
- Dual 800G backbone cabling
- High-density Intra-DC trunk cables
- Pre-connectorized trunk cables
- High density patch panels (rear-side)
- Hyperscale data centers

KEY BENEFITS

- **High density connector 64F (4 x 16F)**
- **Trunk cable systems**

Mechanical Data

	Value
Durability	50 Matings per GR-1435-Core
Fiber Count	Multi-fiber *(12, 16, 24, 32 fibers)*
Cable Suitablity	16/32-fiber, 20 0µm or 12/24-fiber, 250 µm ribbon
Ferrule Material	Polymer
Dust Protection Method	Removable dust plugs that encapsulate the ferrules

Optical Data

	Singlemode	Multimode
	APC	MM (APC)
	SM Super Low Loss	MM Super Low Loss
Typical Insertion Loss (dB)*	0.15	0.15
Max. Insertion Loss (dB)*	0.35	0.35
Typical Return Loss (dB)*	≥60	≥45
Ferrule Diameter (µm)	SN-MT ferrule 16-fiber, 200 µm in a single row SN-MT ferrule 32-fiber, 200 µm in dual rows SN-MT ferrule 12-fiber, 250 µm in a single row SN-MT ferrule 24-fiber, 250 µm in dual rows	

** Based on master grade jumper to low loss random mating test*

ORDERING

CONNECTOR TYPE	GUIDE PIN GENDER	PERFORMANCE	FIBER COUNT	HOUSING COLOR	BOOT COLOR	BOOT TYPE	SPACER
64A SN-MT Uniboot Connector with Ferrrule 4CH	F Female *(Without Pin)*	SL SM Super Low Loss	12 12 Fiber (250 µm)	G SM Green	3 Black	31 3.0mm Boot	W White
64C SN-MT Uniboot Connector with Ferrrule 2CH	M Male *(With Pin)*		16 16 Fiber (200 µm)			33 3.0mm Short Boot	
			24 24 Fiber (250 µm)			46 3.6mm Short Boot	
			32 32 Fiber (200 µm)				

CONNECTOR TYPE	GUIDE PIN GENDER	PERFORMANCE	FIBER COUNT	HOUSING COLOR	BOOT COLOR	BOOT TYPE	SPACER
64A SN-MT Uniboot Connector with Ferrrule 4CH	F Female *(Without Pin)*	ML MM Super Low Loss	12 12 Fiber (250 µm)	B MM Black	3 Black	31 3.0mm Boot	W White
64C SN-MT Uniboot Connector with Ferrrule 2CH	M Male *(With Pin)*					33 3.0mm Short Boot	
						46 3.6mm Short Boot	

Note: 1. Connector supplied with protective dust cap
2. 24 Fiber version in development

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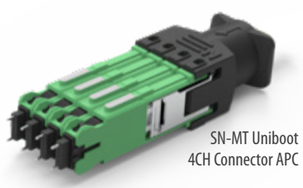
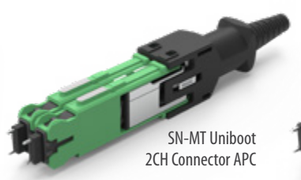
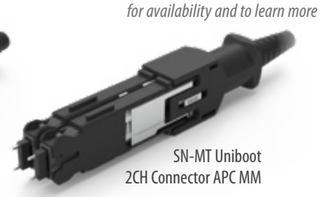


SN-MT Uniboot
4CH Connector APC



SN-MT Uniboot
2CH Connector APC



SN-MT Uniboot
2CH Connector APC MM

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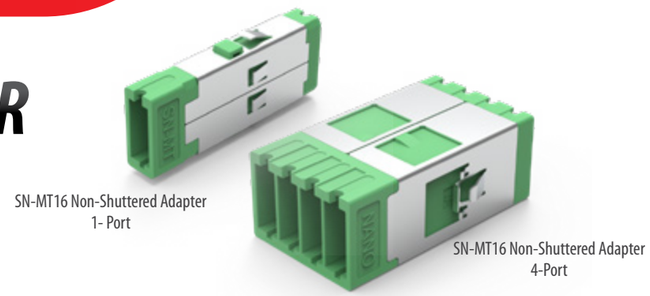
SN®-MT ADAPTER

Non-Shuttered
SN Footprint



SN-MT16 Non-Shuttered Adapter
1- Port

SN-MT16 Non-Shuttered Adapter
4-Port

SENKO's SN®-MT non-shuttered adapters are available either as a 1 or 4-port variant. The single port is designed for applications such as BASE-16 to Base-2 transitions where the adapter is placed at the rear of fiber management cassettes or panels. The 4-port version is designed to maximize port density within high-density patch panels or active equipment. The 4-port adapter has individual walls between each port for clearer separation and improved connector alignment.

Due to its compact size, the SN®-MT, 4-port adapter allows users to achieve the highest possible density within patch panels and optical distribution frames. Up to 6,912 fibers can be presented in a single 1RU (Rack Unit) subject to cable management and connector-access limitations. These adapters can either to be snapped into panel cut-outs or screwed into place using an appropriate bolt and nut. Adapters incorporating an integrated fixing flange will require additional space between each cut-out, and the maximum density per RU will be lower.

FEATURES

- Premium one-piece body design
- Allows up to 3,456 fibers per 1RU with SN®-MT16
- Allows up to 6,912 fibers per 1RU with SN®-MT32
- Accepts SN®-MT standard and Junior connectors
- Individual port separation
- Supports 1.6T VSFF connectivity
- Identification marking for fast and simple connector alignment

APPLICATIONS

- High-density patch panels
- Backbone trunks
- Base-16 transition modules
- Spine/Leaf architectures
- High-density cross-connects
- Switch replication
- Opto-electronic equipment
- Hyperscale, edge, enterprise and colocation data centers

KEY BENEFITS

Optimum panel packing density

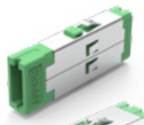
Mechanical Data

Mechanical Data	Value
Durability	50 matings per GR-1435-Core
Fixing Method	Plastic pins for stacking and fitment into printed wiring boards
Housing Material Type	Plastic
Fixing Spring Material Type	Metal stainless steel
Sleeve Material	Plastic *(precise alignment with integrated guide rails)*
Dust Protection Method	Removable dust plugs

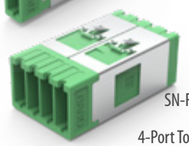
Environmental Data

Environmental Data	Value
Operating Temperature	-40°C to +75°C
RoHS Compliance	2015/863 RoHS
REACH Compliance	Yes
Free of Halogen	Yes
Humidity Resistance	95%

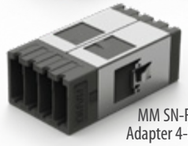
ORDERING



SN-MT
SN-Footprint
Adapter
1-Port



SN-MT
SN-Footprint
Adapter
4-Port Top Mount



SN-MT
MM SN-Footprint
Adapter 4-Port MM

SN-MT FOOTPRINT TYPE		FLANGE		HOUSING COLOR	
651W	SN-MT 1-Port Non-Shuttered Adapter	**1**	With Flange	**2**	Black (Multimode)
654W	SN-MT 4-Port Non-Shuttered Adapter	**2**	Without Flange	**3**	Green (Singlemode)
		3	Top Mount		

Note: Adapter supplied with protective dust-cap on both sides

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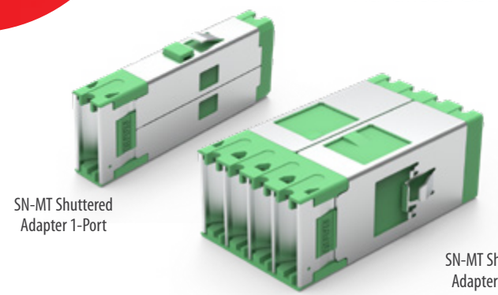
SN®-MT ADAPTER
Shuttered
SN Footprint



SN-MT Shuttered Adapter 1-Port

SN-MT Shuttered Adapter 4-Port

SENKO's SN®-MT shuttered adapters are available either as a 1, 2, or 4-port variant. The single port is designed for applications such as BASE-16 to Base-2 transitions, where the adapter is placed at the rear of fiber management cassettes or panels. The 4-port version is designed to maximize port density within high-density patch panels or active equipment.

Due to its compact size, the SN®-MT, 4-port adapter allows users to achieve the highest possible density within patch panels and optical distribution frames. Up to 6,912 fibers can be presented in a single 1RU (Rack Unit) subject to cable management and connector-access limitations. These adapters feature integrated shutters on each port that reduces the impact of dirt and dust ingress and offers a degree of laser protection for the user. When the connector is inserted into the adapter, the body of the connector (not the ferrule) pushes the shutter open so that the ferrules can be guided into the adapter. Shuttered SN®-MT adapters can either be snapped into panel cut-outs or screwed into place using an appropriate bolt and nut (with flange type). Adapters incorporating an integrated fixing flange will require additional space between each cut-out, and the maximum density per RU may be reduced.

FEATURES

- Premium one-piece body design
- Allows up to 3,456 fibers per 1RU with SN®-MT16
- Allows up to 6,912 fibers per 1RU with SN®-MT32
- Accepts SN®-MT standard and junior connectors
- Integrated port shutters
- Supports 1.6T VSFF connectivity
- Identification marking for fast and simple connector alignment

APPLICATIONS

- High-density patch panels
- Backbone trunks
- Base-16 transition modules
- Spine/leaf architectures
- High-density cross-connects
- Switch replication
- Opto-electronic equipment

KEY BENEFITS

✔ **Optimum panel packing density**

Mechanical Data

Mechanical Data	Value
Durability	50 matings per GR-1435-Core
Fixing Method	Snap-fit *(adapter without flange)* or screw and nut *(adapter with flange)*
Housing Material Type	Plastic
Fixing Spring Material Type	Metal stainless steel
Sleeve Material	Plastic *(precise alignment with integrated guide rails)*
Dust Protection Method	Integrated shutter

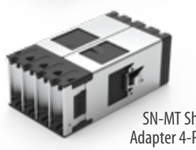
Environmental Data

Environmental Data	Value
Operating Temperature	-40°C to +75°C
RoHS Compliance	2015/863 RoHS
REACH Compliance	Yes
Free of Halogen	Yes
Humidity Resistance	95%

ORDERING

SN-MT Shuttered Adapter 1-Port

SN-MT Shuttered Adapter 4-Port



SN-MT Shuttered Adapter 4-Port MM

SC FOOTPRINT TYPE		FLANGE		HOUSING COLOR	
651S	SN-MT 1-Port Shuttered Adapter	**1**	With Flange	**2**	Black (Multimode)
		2	Without Flange	**3**	Green (Singlemode)

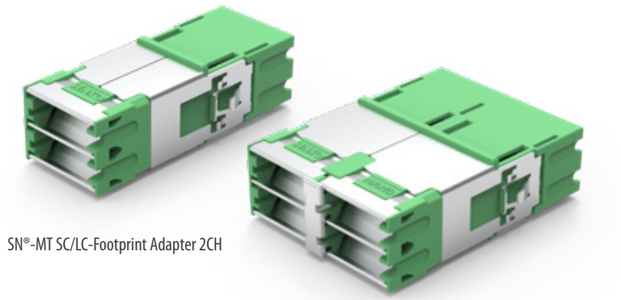
SN-MT FOOTPRINT TYPE		FLANGE		HOUSING COLOR	
654S	SN-MT 4-Port Shuttered Adapter	**1**	With Flange	**2**	Black (Multimode)
		2	Without Flange	**3**	Green (Singlemode)
		3	Top Mount		

Note: Adapter supplied with protective dust-cap non-shuttered side

SENKO® Advanced Components

SN®-MT ADAPTER

Shuttered SC/LC-Footprint 2 and 4-Channel



SN®-MT SC/LC-Footprint Adapter 2CH

SN®-MT SC/LC-Footprint Adapter 4CH

SENKO's SN®-MT SC/LC-footprint shuttered adapters are available either as a 2-channel or 4- channel variant. The 2-channel type is designed to fit to legacy hardware incorporating an SC simplex (LC duplex) cut-out. The 4-channel version is designed to fit into legacy hardware incorporating the SC duplex (LC quad) cut-out.

These retro-fittable adapters are the ideal choice for cabling providers or equipment manufacturers that want to upgrade their existing systems to SN®-MT hyper-density without redesigning new panels or hardware. Each adapter will increase the density of existing SC/LC-based systems and subsequently reduce the total cost per port of the overall system. Operators can benefit from significantly reduced rack consumption and improve their RU (Rack Unit) revenue-efficiency accordingly.

FEATURES

- Retro-fittable to standard SC/LC panel cut-outs
- Increase patch-panel density of LC
- Integrated shutter reduces impact of dust and dirt ingress
- Accepts SN®-MT standard and junior connectors
- Supports 1.6T VSFF connectivity
- Idenfification marking for fast and simple connector alignment

APPLICATIONS

- Upgrading existing fiber management hardware from SC/LC to SN®-MT
- Improved rack-space utilization in Brownfield data centers
- High-density centralized cross-connects and patch panels
- Mixed fiber panels combining different connector types

KEY BENEFITS

- **Integrated shutter**
- **Retro-fittable to SC/LC cut-outs**

Mechanical Data

Mechanical Data	Value
Durability	50 matings per GR-1435-Core
Fixing Method	Snap-fit *(adapter without flange)* or screw and nut *(adapter with flange)*
Housing Material Type	Plastic
Fixing Spring Material Type	Metal stainless steel
Sleeve Material	Plastic *(precise alignment with integrated guide rails)*
Dust Protection Method	Integrated shutter

Environmental Data

Environmental Data	Value
Operating Temperature	-40°C to +75°C
RoHS Compliance	2015/863 RoHS
REACH Compliance	Yes
Free of Halogen	Yes
Humidity Resistance	95%

ORDERING

SN-M SC/LC-Footprint Shuttered Adapter 2CH

SN-MT SC/LC-Footprint Shuttered Adapter 4CH

SC FOOTPRINT TYPE		FLANGE		HOUSING COLOR	
662S	SN-MT 2-Port Shuttered Adapter	1	With Flange	2	Black (Multimode)
		2	Without Flange	3	Green (Singlemode)

SC FOOTPRINT TYPE		FLANGE		HOUSING COLOR	
664S	SN-MT 4-Port Shuttered Adapter	1	With Flange	2	Black (Multimode)
		2	Without Flange	3	Green (Singlemode)

662S - 12 ORDER CODE example

Note: Adapter supplied with protective dust-cap non-shuttered side

SENKO®
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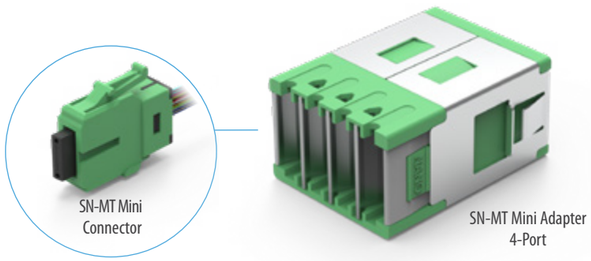
SN®-MT *MINI ADAPTER*

Shuttered
SN Footprint



SENKO's SN®-MT Mini adapter is designed to maximize port density within high-density patch panels or active equipment. Due to its compact size, the SN®-MT Mini, 4-port adapter allows users to achieve the highest possible density within patch panels and optical distribution frames. Up to 6,912 fibers can be presented in a single 1RU (Rack Unit) subject to cable management and connector-access limitations. This adapter features integrated shutters on each port that reduces the impact of dirt and dust ingress and offers a degree of laser protection for the user. When the connector is inserted into the adapter, the body of the connector (not the ferrule) pushes the shutter open so that the ferrules can be guided into the adapter. SN®-MT mini adapters can either be snapped into panel cut-outs or screwed into place using an appropriate bolt and nut (with flange type). Adapters incorporating an integrated fixing flange will require additional space between each cut-out, and the maximum density per RU may be reduced.

FEATURES

- Premium one-piece body design
- Up to 6,912 fibers per 1RU (Rack Unit)
- Accepts SN®-MT standard and junior connectors
- Integrated port shutters
- Supports 1.6T VSFF connectivity
- Identification marking for fast and simple connector alignment

APPLICATIONS

- High-density patch panels
- Backbone trunks
- Base-16 transition modules
- Spine/leaf architectures
- High-density cross-connects
- Switch replication
- Opto-electronic equipment

KEY BENEFITS

✔ **Optimum panel packing density**

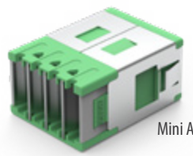
Mechanical Data

Mechanical Data	Value
Durability	50 matings per GR-1435-Core
Fixing Method	Snap-fit *(adapter without flange)* or screw and nut *(adapter with flange)*
Housing Material Type	Plastic
Fixing Spring Material Type	Metal stainless steel
Sleeve Material	Plastic *(precise alignment with integrated guide rails)*
Dust Protection Method	Integrated shutter

Environmental Data

Environmental Data	Value
Operating Temperature	-40°C to +75°C
RoHS Compliance	2015/863 RoHS
REACH Compliance	Yes
Free of Halogen	Yes
Humidity Resistance	95%

ORDERING



SN-MT
Mini Adapter
4-Port

SN-MT FOOTPRINT TYPE	
6W4S	SN-MT 4-Port Shuttered Adapter

FLANGE	
1	With Flange
2	Without Flange
3	Top Mount

HOUSING COLOR	
2	Black (Multimode)
3	Green (Singlemode)

Note: Adapter supplied with protective dust-cap non-shuttered side

Contact sales@senko.com for availability and to learn more

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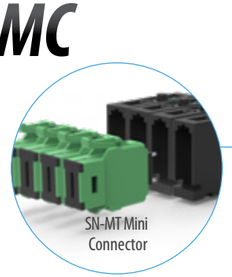
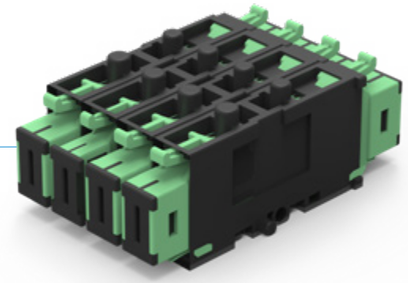
SN®-MT MINI MBMC ADAPTER

12, 16, 24, and 32-Fiber Stackable design BTW (Behind The Wall)





SN-MT Mini MBMC Adapter

The SN®-MT Mini MBMC adapter is the shortest in the SN®-MT family and offers users the most space-efficient solution for applications demanding optimized BTW (Behind The Wall) space-saving. In combination with SN® Mini connectors, as much as 14.1mm can be saved compared with standard adapters and connectors, making it the ideal solution for optoelectronic applications requiring circuit boards or other vital components to share the same space as fiber optic connectivity.

The SN®-MT Mini MBMC adapter has a latch on the upper side of the connector that provides an audible click when it is plugged into an adapter. At the rear of the connector is a boot that will accept 16-fiber ribbon with a 200 µm construction. Mini connectors are most commonly used for applications such as high fiber-count ribbon splicing or optoelectronic applications where additional space is required BTW.

The SN®-MT Mini MBMC adapter is only compatible with SN®-MT Mini connectors.

FEATURES

- Premium one-piece body design
- Supports 800G VSFF connectivity
- Stackable design for multi-port applications

APPLICATIONS

- Backbone trunks
- Spine/leaf architectures
- Opto-electronic equipment

KEY BENEFITS

✔ **Optimum for on-board interconnect**

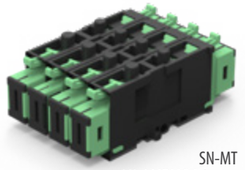
Mechanical Data

Mechanical Data	Value
Durability	50 matings per GR-1435-Core
Fixing Method	Plastic pins for stacking and fitment into printed wiring boards
Housing Material Type	Plastic
Fixing Spring Material Type	Metal stainless steel
Sleeve Material	Plastic *(precise alignment with integrated guide rails)*
Dust Protection Method	Removable dust plugs

Environmental Data

Environmental Data	Value
Operating Temperature	-40°C to +75°C
RoHS Compliance	2015/863 RoHS
REACH Compliance	Yes
Free of Halogen	Yes
Humidity Resistance	95%

ORDERING



SN-MT
Mini MBMC Adapter

SN-MT FOOTPRINT TYPE		HOUSING COLOR	
6Q1	Stackable SN-MT Mini MBMC Adapter	2	Black (Multimode)
		3	Green (Singlemode)

SN-MT FOOTPRINT TYPE		HOUSING COLOR		STACKING		QTY OF ADAPTER	
6Q1S	Stackable SN-MT Mini MBMC Adapter, Stacked assembly	2	Black (Multimode)	V	Vertical	2	2 pcs
		3	Green (Singlemode)	3	Horizontal	3	3 pcs
						4	4 pcs
						X	X pcs

Note: Adapter supplied with protective dust-cap on both sides

Contact sales@senko.com for availability and to learn more

Contact SENKO

SENKO®
Advanced Components

SN® and SN®-MT Maintenance

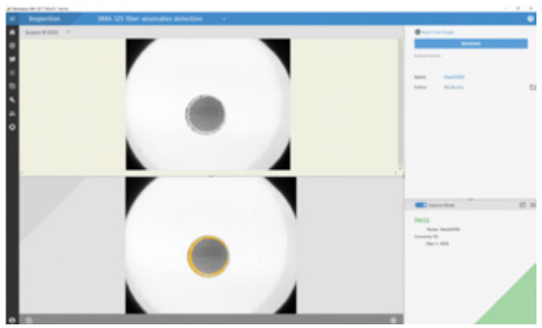
SENKO provides a comprehensive portfolio of 'factory-based' and 'field-based' tools and accessories to support the assembly, deployment and maintenance of SN® and SN®-MT connectivity.

SENKO®
Advanced Components

SN® Inspection

SUMIX Scopio-B Inspection Scope

SMX-Scopio-B is a digital inspection probe for visualization of connector end faces and analysis of connector defects. Excellent analysis for single fiber SN and CS with 1.25mm ferrules. This inspection scope can be used for both in adapter and unmated end faces in the SN and many legacy products including SC, FC, ST, LC, CS, SN E2000™ – PC and APC as well as MT, MPO, SMA and many MIL spec connections.



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ORDERING

ORDERING	
SMX-SCOPIO-B	**SUMIX Scopio-B Inspection Scope**

- IEC inspection analysis
- 1.8 µm resolution
- 600x variable magnification

SN® and SN®-MT Inspection

SUMIX Manta HM Inspection Scope

SN®-MT Compatible

The MANTA HM inspection scope is designed for high-performance inspection of all types of single fiber and multi-fiber optical connectors, patch cords and bulkheads. The MANTA HM inspection scope is used to detect scratches, contamination and other surface defects as small as 0.75 µm on the end face of the connector.

SN-MT Verifier
Verifying a SN-MT polarity and continuity

SN-MT Tips
Tips for both SN-MT ferrule and assembly

SUMIX Maanta Viewing Screen
Works for Google PIXEL and other Android devices

FEATURES

- 4.1 mm x 3.0 mm field of view
- Detailed high-resolution picture with 1.8 µm resolution
- Autofocus and pass-fail analysis and measurements for 16F in 3 seconds
- Able to identify surface defects as small as 0.75 µm
- Weighted benchtop base available to prevent slips
- Mobile inspection and reporting possible with viewing screen accessory

ORDERING

ORDERING	
SMX-Manta-HM	**SUMIX Manta HM Inspection Scope**

ACCESSORIES	
MNT-VSFF-PC-F-A	Inspection tip for in adapter SN/UPC
MNT-W-VSFF/PC-M	Inspection of SN/UPC duplex connectors in adapters with 2 ferrules visible at once
SMX-T-1.25/PC-M	Inspection tip for unmated SN/UPC
SMX-T-1.25/APC-M	Inspection tip for unmated SN/APC
MNT-ADP	Adapter for use with the SMX inspection tips
MNT-W-MT/APC-SN-FER	**Inspection tip for SN-MT ferule**
MNT-W-MT/APC-SN	**Inspection tip for SN-MT assembly**
MNT-W-MT/APC-SN-BTW	Inspection tip for SN-MT BTW connectors
MNT-W-Stand	Benchtop stand for MANTA W+ and HM scopes
SN-MT Verifier	**SN-MT Polarity Verifier Module**
MNT-Phone-Kit	**Pixel + Mount Kit for MANTA**

SENKO®
Advanced Components

SN® Interferometry

SUMIX MAX QS+ Inspection Scope

The MAX-QS+ is a white-light and phase-shift interferometer for inspection of single fiber SN. MAX-QS+ features portable design, autofocus, 100 micron scan range for fiber height and resolution of 1.1 µm. This scope end measures end face geometry while featuring surface anomaly detection.

ORDERING

ORDERING	
MAX-QS+	SUMIX Max QS+ Interferometer

Only compatible with SN®

SUMIX WIZ-QS Inspection Scope

The WIZ-QS-110 is an automated interferometer for inspection of single fiber connectors and bare fiber. This interferometer is a basic solution for interferometric inspection of fiber optic connectors in high-volume production environment, where speed, simplicity and precision matter the most. The white light measurement algorithm and precision-aligned fixtures do not require frequent calibration making it stand out from the competition in the same category of interferometers. End face geometry measurement only.

ORDERING

ORDERING	
WIZ-QS-110	SUMIX WIZ-QS Interferometer

SN® and SN®-MT Interferometry

SUMIX MAX Quantum Interferometer

ORDERING

ORDERING	
MAX-Quantum	SUMIX Manta Quantum Interferometer

ACCESSORIES	
MAX-F-1.25/PC-SN	Fixture for SN/UPC connectors
MAX-F-1.25/PC-VSFF	Fixture for SN/UPC ferrules
MAX-F-1.25/APC-VSFF	Fixture for SN/APC ferrules
MAX-SVF-SN/APC	Inspection tip for SN-MT *(needs handler)*
MAX-H-SN-MT-C2	Handle for SN-MT ferrule inspection
MAX-H-SN-MT-CON	Handler for SN-MT connector inspection
MAX-H-SN-MT-CON-BTW	Handler for SN-MT BTW connector
AC-SN-MT-PI-C2	Pin insertion tool for female SN-MT ferrules and connectors

SUMIX MAX QM+ Inspection Scope

MAX-QM+ is an automated interferometer for inspection of single and multi-fiber connectors. This interferometer provides high measurement speed with a portable design. The software autofocus and a large field of view enables the MAX-QM+ interferometer ideal for testing SN or MT and MPO with the 12 or 16 fibers arrays. End face geometry measurement only, and can measure hole parallelism which is essential for mating multi-fiber arrays.

ORDERING

ORDERING	
MAX-QM+	SUMIX MAX-QM+ Interferometer

Note: Works with SN-MT Verifier Module

SENKO®
Advanced Components

Cleaning Consumables and Sticks for SN® and SN®-MT

Smart Cleaner™ Cassette

The SMART CLEANER CASSETTE is an economical cleaning device that utilizes a micro-woven fabric cleaning ribbon for wiping away residue and dust-based contamination from fiber optic end faces. A manual advance of the cleaning ribbon allows operators to maximize the efficiency of the product in operation.

ORDERING

ORDERING	
SCK-CC-100	SMART CLEANER CASSETTE *Cleans Unpinned MT and Single Fiber*
SCK-CC-200	SMART CLEANER CASSETTE Male MT *Cleans 400 pinned MPO, MT and SN-MT*

Optipop R Cassette

The OPTIPOP R cassette effectively wipes residue, and dust-based contamination from ferrule end faces. The cassettes feature an ergonomic trigger for advancing a fresh section of the micro woven cleaning ribbon with engagement. Using replacement cleaning spools will lower your overall cleaning costs. A wide range of compatiblity, including legacy connectors, allows standardized cleaning of multi-fiber projects on a single cassette.

ORDERING

ORDERING	
CRE-01	OPTIPOP R Standard - Single Slot Unpinned MT and Single Fiber *Cleans SN, CS and unpinned (female) SN-MT*
CRC-RS-01	Refill for 800 Duplex Connector End Faces
CRE-03	OPTIPOP R Standard Male MT *Cleans SN, SN-MT and 12F/16F MPO*

Cleaning Consumables and Sticks for SN® and SN®-MT

OPTRES Gel Cleaner

The OPTRES Gel Cleaning Pad by Tomoegawa uses optical-grade cleaning gel. The cleaning process is as simple as pulling back the cover and touching the end face of the connector onto the gel. The OPTRES Gel Cleaning Pad's compact size makes it ideal for use with test equipment and network installation cleaning kits. The gel material is non-toxic and non-flammable. Compatible with SN, SN-MT, CS and MPO connectors.

ORDERING

SN CLEANING	
SCK-PT-MPO-01	OPTRES GEL Cleaning Pad

SENKO®
Advanced Components

Cleaning Consumables and Sticks for SN®

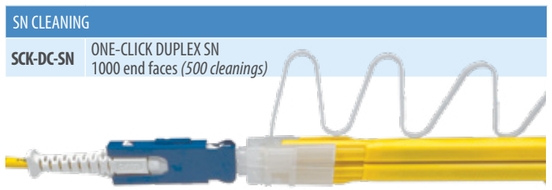
One Click
Duplex SN

Only compatible with SN®

The ONE-CLICK DUPLEX SN CLEANER is effective for wiping away residues and dust contamination from SN/UPC and SN/APC end faces. The dual cleaning tips clean both end-faces with each engagement. This makes this cleaner ideal for high density applications including hyperscale data centers and central offices.

ORDERING

SN CLEANING	
SCK-DC-SN	ONE-CLICK DUPLEX SN 1000 end faces *(500 cleanings)*



Smart Cleaner™
Mini 1.25 mm

The SMART CLEANER MINI 1.25 MM tool effectively cleans residue and dust-based contamination from fiber optic end-faces. Its small form factor allows for cleaning in tight spaces while still allowing up to 400 connectors to be cleaned.

ORDERING

ORDERING	
SCK-SS-M-C125	SMART CLEANER MINI 1.25MM *(400 cleanings)*

Cleaning Consumables and Sticks for SN® and SN®-MT

Optical Grade Wipes

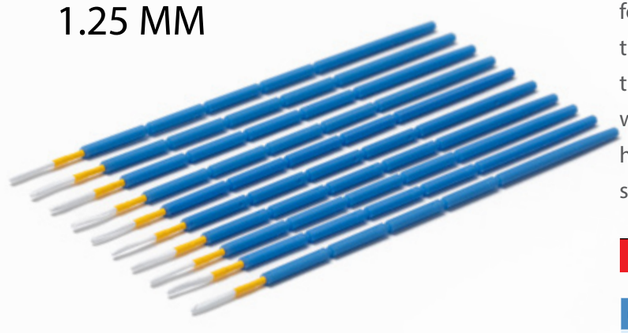
SENKO'S Optical Grade Wipes are ideal for cleaning your network's connectors end faces and bare fibers including ribbons for splicing. The wipes are lint free, soft and highly absorbent. There are 100 4X4 wipes in the resealable bag.

ORDERING

SN CLEANING	
AFT-G-NW	OPTICAL GRADE Wipes

Note: Wipes are sold in packs of 100

NEOCLEAN Stick
1.25 MM



The 1.25MM NEOCLEAN sticks are an effectively option for wiping away residue and dust contamination from the SN and SN-MT end-faces of in adapter assemblies and transceiver ports. The fabric cleaning tip enables cleaning without the need for solvents. The hexagon shaped handle with notches prevent accidental roll aways and shortening the handle for use in confined spaces.

ORDERING

ORDERING	
CSK-01	1.25 MM NEOCLEAN Stick

Note: Sticks are sold individually in increments of 10

SENKO®
Advanced Components

SN® Tools Make the Job Easier

SN Insert-Extract Tool

Insert and extract SN® assemblies into tight spaces. A spring grip securely holds onto the SN assembly's push-pull boot. The ergonomic design of the handles make it comfortable to use by both left or right handed operators.

ORDERING

SN CLEANING	
RMT-203	Insert-Extract Tool

SN Crimp Tool

The SN® Crimp tool is designed to allow users to crimp SN connectors during the factory assembly process.

ORDERING

ACCESSORIES	
CRT-201	SN Crimp Tool
CRT-202	SN EZ-Flip Crimp Tool

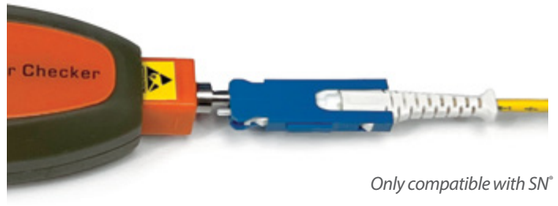
SN® Tools Make the Job Easier

Smart Checker™ Visual Fault Locator (VFL)

The Visual Fault Locator (VFL) is an effective tool for verifying the polarity of fiber optic cable assemblies and sliced fibers, locating broken fibers and for identifying micro and macro bending points with optic assemblies. The VFL has a 2.5mm port. A 1.25mm adapter is also available.

ORDERING

ACCESSORIES	
AFT-G-FC	Smart Checker VFL
AFT-G-CAC	1.25 mm Adapter



Only compatible with SN®

APC Ferrule Alignment Tool

The APC ferrule alignment tool allows technicians to align the APC ferrules after the connector polishing process.

ORDERING

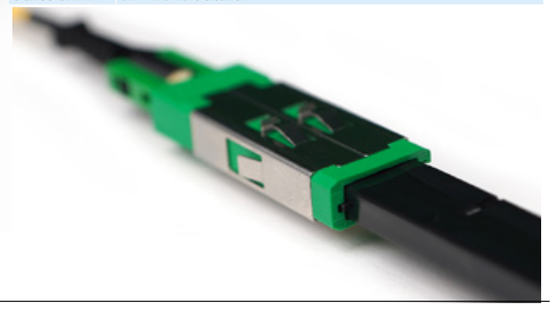
SN CLEANING	
TL-611-APC-1 APC	APC Ferrule Alignment Tool

SENKO®
Advanced Components

SN®-MT Tools Make the Job Easier

Smart Cleaner™ SN-MT

The SMART CLEANER tool effectively cleans residue and dust-based contamination from fiber optic end-faces. Its small form factor allows for cleaning in tight spaces while still allowing up to 500 connectors to be cleaned.



Only compatible with SN®-MT

ORDERING

SN CLEANING	
SCK-SS-SNMT	SN-MT Smart Cleaner

SN-MT Crimp Tool

The SN® Crimp tool is designed to allow users to crimp SN connectors during the factory assembly process.

ORDERING

ACCESSORIES	
CRT-203	SN-MT Crimp Tool for 2.6 mm

SN®-MT Tools Make the Job Easier

SN-MT 200 µm Ribbonizer Tool

ORDERING

ACCESSORIES	
	x

Only compatible with SN®-MT

SN-MT Housing Removal Tool

ORDERING

ACCESSORIES	
RMT-205-xx	SN-MT Housing Removal Tool 5"
RMT-205-xx	SN-MT Housing Removal Tool 7"

SENKO®
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