

Data Sheet s4u[®] SC Connector

Numerous applications

Fiber Optic Backbone, CATV and FTTH Networks, Data Centers, Network Equipment Interface

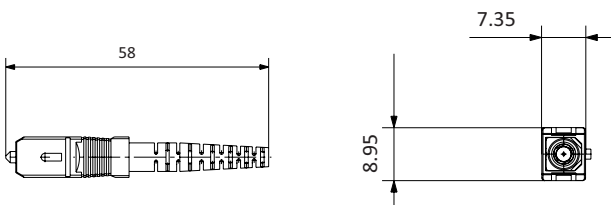
Unique features

- installer-friendly robust design with quick and reliable push-pull mechanism
- proven technology with excellent cost/performance ratio and high availability
- worldwide standard with good manufacturer compatibility
- colored housing for easy identification of product variants
- premium connector with red body
- duplex clip for easy fixing of two simplex connectors
- crimping dimensions LC compatible



Specifications

Compliance	IEC 61754-4, TIA 604-3, RoHS
Alignment technology	2.5mm full ceramic ferrule (Zirconia ZrO ₂)
Operating temperature	-40°C to +85°C
Flammability	UL94 V-0
Durability	> 1000 mating cycles
Fiber, cable retention	IEC 61300-2-4; 100N on 2.0mm cables
Static side load	IEC 61300-2-42; 5N on 2.0mm cables
Transmission with applied tensile load	GR-326 CORE 4.4.3.5
Insertion loss, fiber core tunability	IEC 61755-3-1 / IEC 61755-3-2, Grade B PREMIUM Version: 0.15dB on 97%
Color scheme, housing	Green: Singlemode APC 8° and APC 9° Blue: Singlemode UPC Grey, aqua, magenta: Multimode



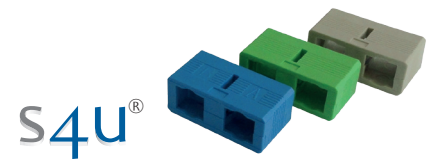
Data Sheet s4u[®] SC Connector

Order information

Order code	Description	Color	Packing
CO-SC-APC	Fiber Optic Connector SC/SM APC	green	200
CO-SC-UPC	Fiber Optic Connector SC/SM UPC	blue	200
CO-SC-OM2	Fiber Optic Connector SC/MM	grey	200
CO-SC-APC-PT	Fiber Optic Connector SC/SM APC 0.9mm, green boot	green	200
CO-SC-UPC-PT	Fiber Optic Connector SC/SM UPC 0.9mm, blue boot	blue	200
CO-SC-OM2-PT	Fiber Optic Connector SC/MM OM2 0.9mm, grey boot	black	200
CO-SC-OM3-PT	Fiber Optic Connector SC/MM OM3 0.9mm, aqua boot	black	200
CO-SC-OM4-PT	Fiber Optic Connector SC/MM OM4 0.9mm, magenta boot	black	200

Data Sheet s4u[®] SC Duplex Clip

- material LSFH, flammability UL94 V-0
- two-piece snap design
- A-B channel mark

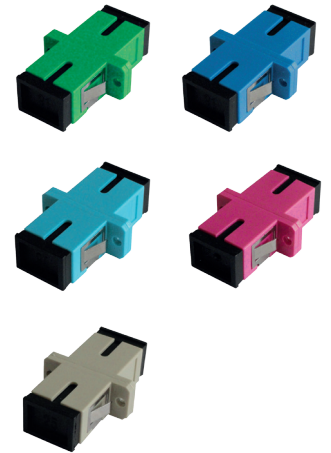
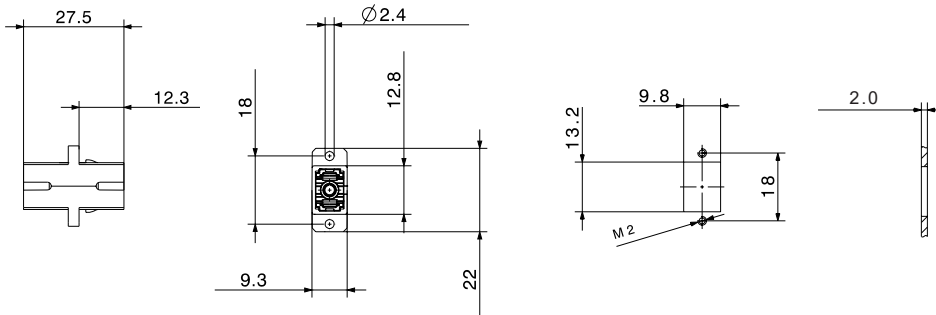


Order information

Order Code	Description	Color	Packing
CLIP-SC-GRN-DX	SC Duplex Clip	green	200
CLIP-SC-BLU-DX	SC Duplex Clip	blue	200
CLIP-SC-GRY-DX	SC Duplex Clip	grey	200

Data Sheet s4u® SC Simplex Adapter with 2-hole flange

- 2-hole flange for screw mounting
- integrated metal latches for snap mounting
- ceramic precision alignment sleeve

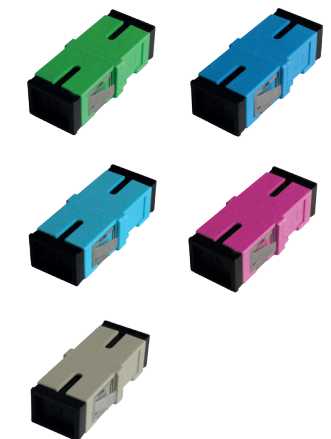
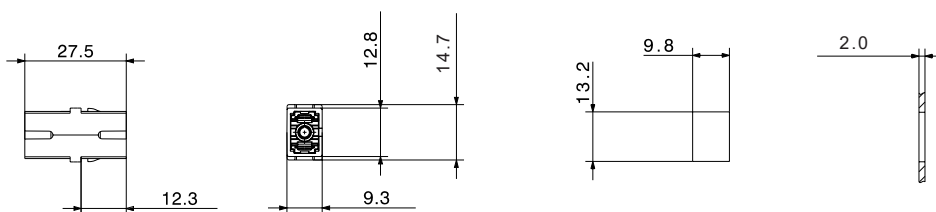


Order information

Order Code	Description	Color	Packing
AD-SC-SX-2H-GRN	Fiber Optic Adapter SC/SM APC Simplex, 2-hole flange	green	200
AD-SC-SX-2H-BLU	Fiber Optic Adapter SC/SM UPC Simplex, 2-hole flange	blue	200
AD-SC-SX-2H-GRY	Fiber Optic Adapter SC/MM OM2 Simplex, 2-hole flange	grey	200
AD-SC-SX-2H-AQU	Fiber Optic Adapter SC/MM OM3 Simplex, 2-hole flange	aqua	200
AD-SC-SX-2H-MAG	Fiber Optic Adapter SC/MM OM4 Simplex, 2-hole flange	magenta	200

Data Sheet s4u® SC Simplex Adapter with short flange

- short flange for high density applications
- integrated metal latches for snap mounting
- ceramic precision alignment sleeve

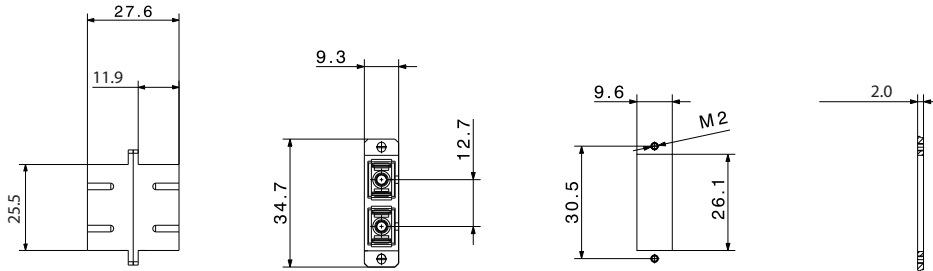


Order information

Order Code	Description	Color	Packing
AD-SC-SX-SF-GRN	Fiber Optic Adapter SC/SM APC Simplex, short flange	green	200
AD-SC-SX-SF-BLU	Fiber Optic Adapter SC/SM UPC Simplex, short flange	blue	200
AD-SC-SX-SF-GRY	Fiber Optic Adapter SC/MM OM2 Simplex, short flange	grey	200
AD-SC-SX-SF-AQU	Fiber Optic Adapter SC/MM OM3 Simplex, short flange	aqua	200
AD-SC-SX-SF-MAG	Fiber Optic Adapter SC/MM OM4 Simplex, short flange	magenta	200

Data Sheet s4u® SC Duplex Adapter with 2-hole flange

- 2-hole flange for screw mounting
- integrated latches for snap mounting
- ceramic precision alignment sleeve

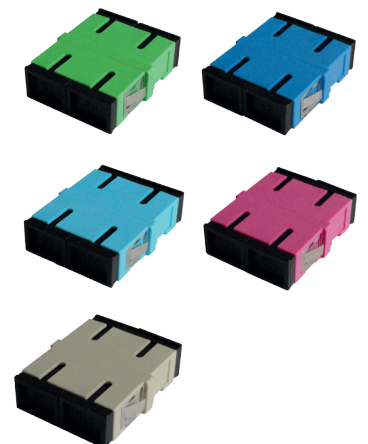
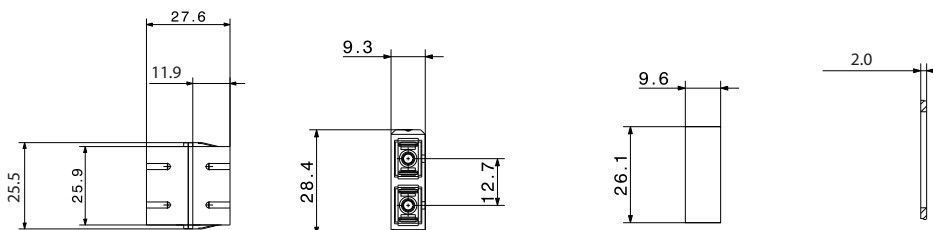


Order information

Order Code	Description	Color	Packing
AD-SC-DX-2H-GRN	Fiber Optic Adapter SC/SM APC Duplex, 2-hole flange	green	100
AD-SC-DX-2H-BLU	Fiber Optic Adapter SC/SM UPC Duplex, 2-hole flange	blue	100
AD-SC-DX-2H-GRY	Fiber Optic Adapter SC/MM OM2 Duplex, 2-hole flange	grey	100
AD-SC-DX-2H-AQU	Fiber Optic Adapter SC/MM OM3 Duplex, 2-hole flange	aqua	100
AD-SC-DX-2H-MAG	Fiber Optic Adapter SC/MM OM4 Duplex, 2-hole flange	magenta	100

Data Sheet s4u® SC Duplex Adapter with short flange

- short flange for high density applications
- integrated latches for snap mounting
- ceramic precision alignment sleeve



Order information

Order Code	Description	Color	Packing
AD-SC-DX-SF-GRN	Fiber Optic Adapter SC/SM APC Duplex, short flange	green	100
AD-SC-DX-SF-BLU	Fiber Optic Adapter SC/SM UPC Duplex, short flange	blue	100
AD-SC-DX-SF-GRY	Fiber Optic Adapter SC/MM OM2 Duplex, short flange	grey	100
AD-SC-DX-SF-AQU	Fiber Optic Adapter SC/MM OM3 Duplex, short flange	aqua	100
AD-SC-DX-SF-MAG	Fiber Optic Adapter SC/MM OM4 Duplex, short flange	magenta	100

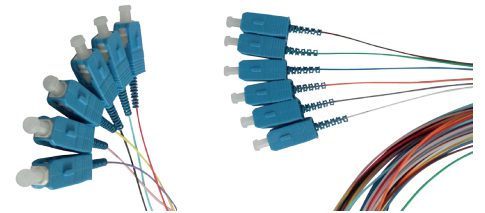
Data Sheet s4u® SC Pigtail

Numerous applications

BTW – Behind-The-Wall application in high-density passive optical networks

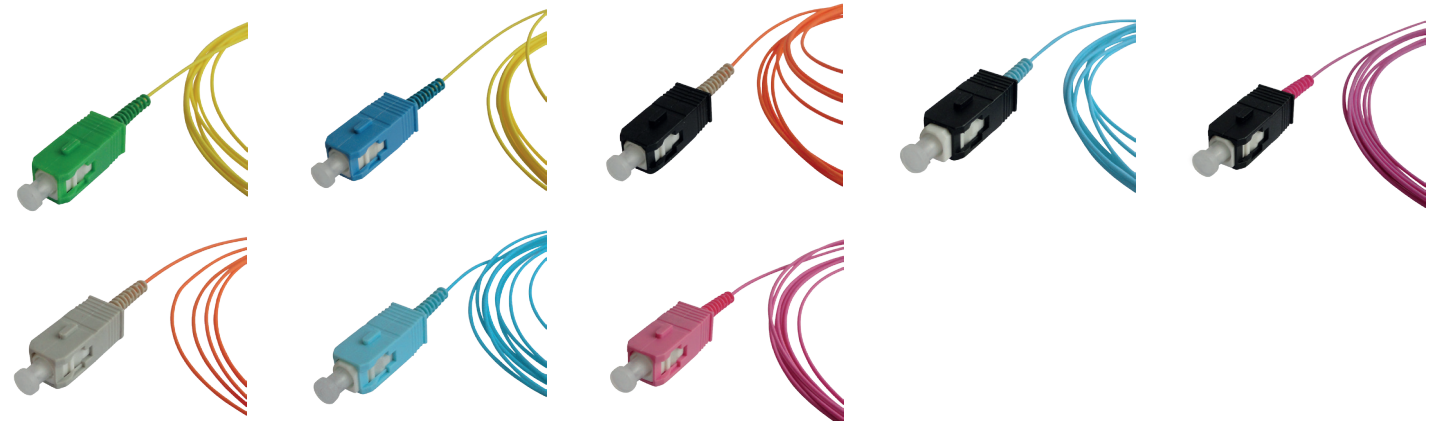
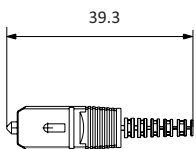
Unique features

- meets Telcordia GR-0326-CORE requirements for high-density applications
- very short rigid length for space saving installations
- colored connector boots for easy identification of product variants
- Pigtail-sets with 12 different 0.9mm tube/fiber colors, optionally dashed for 24-fiber sets



Specifications

SC Connector compliance	IEC 61754-4, TIA 604-3, RoHS
Alignment technology	Full ceramic ferrule (Zirconia ZrO ₂)
Operating temperature	-40°C to +85°C
Flammability	UL94 V-0
Durability	> 1000 mating cycles
Transmission with applied tensile load	GR-0326-CORE 4.4.3.5
Optical performance, insertion loss	Singlemode: ≤ 0.25dB Multimode: ≤ 0.25dB Low-loss: ≤ 0.15dB
Optical performance, return loss	Singlemode APC: ≥ 65dB Singlemode UPC: ≥ 50dB Multimode: ≥ 35dB
Cable types	0.9mm easy-strip (12 colors + 12 colors dashed) 0.9mm tight-tube
Connector end face geometry	IEC 61755-3



Data Sheet s4u[®] SC Patchcord

Numerous applications

FTTX and CATV Networks, LAN and Data Centers, Network Equipment Interface
according to IEC 61753-1 Category U - controlled environment

Unique features

- low insertion loss and excellent repeatability
- quick and robust push-pull connector
- proven technology with high availability
- various customizing options



Specifications

Optical Interface	
Insertion loss, IEC 61300-3-4-B	Singlemode: $\leq 0.25\text{dB}$ Multimode: $\leq 0.25\text{dB}$ Low-loss: $\leq 0.15\text{dB}$
Return loss, IEC 61300-3-6	Singlemode APC: $\geq 80\text{dB}$ Singlemode UPC: $\geq 50\text{dB}$ Multimode: $\geq 35\text{dB}$
End face geometry	IEC 61755-3-1/-2
Fiber core tuning option	IEC 61755-3-1/-2 Grade B (0.25dB on 97%, 0.12dB on 50%) PREMIUM Version: 0.15dB on 97%
Environmental Resistance	
Cable retention	IEC 61300-2-4, 100N on $>2.0\text{mm}$ cable / 70N $\leq 2.0\text{mm}$
Static side load	IEC 61300-2-42, 5N on $\geq 2.0\text{mm}$ cable
Mating Durability	IEC 61300-2-2, > 1000 mating cycles
Torsion	IEC 61300-2-5, 15N/25cycles
Operating temperature	IEC 61300-2-22, -25° to 70°C
Cable types	
Material	LSZH – Low Smoke Zero Halogens (RoHS compliant)
Diameter	1.7mm, 2.0mm, 2.8mm
Colors	SM yellow, MM OM2 orange, MM OM3 aqua MM OM4 violet, MM OM5 lime green

SC Patchcord Order Code Structure

1. Cable Type		2. Connector le/ri		3. Fiber Type		4. Cable Diameter		5. Length	
PC	Simplex Cable	SCA	SC/APC SM	SM	SM G652D	S17	1.7mm	1	1m
PCD	Duplex Fig.8 (Zip Cord)	SCU	SC/UPC SM	A1	SM G657A1	S20	2.0mm	1.5	1.5m
PCR	Duplex Fig.0 (Flat Twin)	SCM	SC/UPC MM	A2	SM G657A2	S28	2.8mm		etc.
				O2	MM OM2				
				O3	MM OM3				
				O4	MM OM4				
				O5	MM OM5				

Order Code Examples

Order Code	Description	Packing
PC-SCA-SCA-SM-S17-1.0	Patchcord Simplex, SC/APC to SC/APC, SM G652D 1.7mm, 1m, yellow	1
PCD-SCA-SCU-A2-S20-3.5	Patchcord Duplex Fig.8, SC/APC to SC/UPC, SM G657A2 2.0mm, 3.5m, yellow	1
PCR-SCM-SCM-O4-S28-5.0	Patchcord Duplex Fig.0, SC/MM to SC/MM, MM 50µm OM4 2.8mm, 5.0m, violet	1

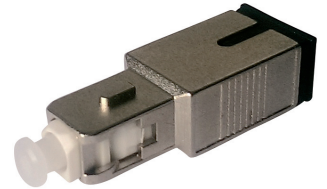
Data Sheet s4u[®] SC/SM Plug Attenuator

Numerous applications

Passive Optical Networks, WDM systems, optical receivers

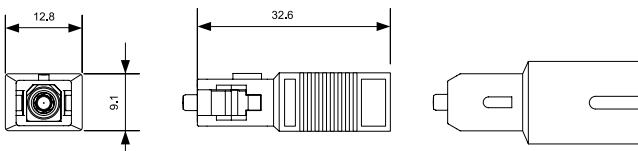
Unique features

- push-pull type
- high stability and reliability
- wavelength independent
- SC interface according to IEC 61754-4



Specifications

Operation wavelength	1260 to 1625nm
Return loss	≥ 55dB (UPC)
	≥ 65dB (APC)
Attenuation tolerance	±0.5 dB for 1 to 5dB attenuation
	±10% for 6 to 30dB attenuation
Polarization dependent loss	≤ 0.2dB
Maximum optical input power	200mW
Operating temperature range	-40 to +80°C
Durability	1000 mating cycles



Order information

Order code	Description	Color	Packing
ATT-SCA-XX	SC APC attenuator xx dB (attenuation 1-20dB in 1dB steps)	metal	1
ATT-SCU-XX	SC UPC attenuator xx dB (attenuation 1-20dB in 1dB steps)	metal	1

Data Sheet s4u[®] HIGH POWER SC Connector and Adapter

Numerous applications

High Performance Networks with laser power beyond 20dBm, WDM and DWDM transmission, Laser-Amplifiers

Laser performance levels overview:

Performance	Laser class	Performance density W/mm ²	Application
5 mW/7 dBm	1	58	
10 mW/10 dBm	1	116	
25 mW/14 dBm	3a	290	
50 mW/17 dBm	3a	580	
100 mW/20 dBm	3b	1160	HP
250 mW/24 dBm	3b	2900	HP
500 mW/27 dBm	3b	5800	HP
1000 mW/30 dBm	4	11600	HP

Unique features

- Metal-free zirconia full ceramic ferrule and precision sleeve for an absolute absence of metal in the optical path
- enhanced ferrule centricity for very low insertion loss
- high return loss preventing damage of transmission equipment
- standard termination technology for repeatable and stable connection over min. 1000mating cycles
- premium connector with red body, laser logo on adapter shutter



s4u[®]

Specifications

Compliance	IEC 61754-4, TIA 604-3, RoHS
Operating temperature	-40°C to +85°C
Flammability	UL94 V-0
Durability	IEC 61300-2-2, > 1000 mating cycles
Insertion loss	max. 0.15dB, random
Return loss	min. 85dB

Order information

Order Code	Description	Packing
AD-SC-SX-2H-GRN-SH	Fiber Optic Adapter SC/SM APC Simplex 2-hole flange, green, with removable shutter, high-power Logo	200
CO-SC-APC-P	Fiber Optic Connector SC/SM APC Simplex Premium, green, red body	200