# Data Sheet s4u® LSH Connector

Numerous applications

FTTX and CATV Networks, LAN and Data Centers, Test and Measurement, Network Equipment Interface, High Power Optical Amplifiers, Uncontrolled Environment according IEC 61753-021-3

Unique features

- robust design with locked push-pull mechanism
- automatic closing metallic shutter for ferrule end-face protection and laser beam safety
- low loss mating with excellent repeatability
- "0.1dB" version with PREMIUM ferrule
- high return loss connection
- replaceable lever with color coding and keying options
- fully compatible to E-2000 products
- Swisscom approved
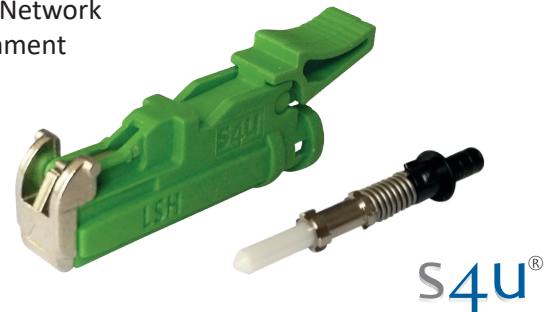
Specifications

Compliance	IEC 61754-15, TIA 604-16, RoHS, Swisscom Spec.
Alignment technology	2.5mm full ceramic ferrule (Zirconia ZrO2)
Operating temperature	-40°C to +85°C
Flammability	UL94 V-0
Durability	IEC 61300-2-2, > 1000 mating cycles
Fiber, cable retention	IEC 61300-2-4; 100N on 2.0mm cable
Static side load	IEC 61300-2-42; 5N on 2.0mm cable
Flexing of strain relief	IEC 61300-2-44, 5N on 100 bending cycles
Insertion loss, fiber core tunability	IEC 61755-3-1 / IEC 61755-3-2, Grade B, 0.25dB on 97% PREMIUM Version: 0.15dB on 97%
Return loss	APC > 85dB, UPC > 50dB, MM > 35dB
Housing color (standard)	green: singlemode APC 8°
	singlemode UPC: blue
	multimode: black or beige
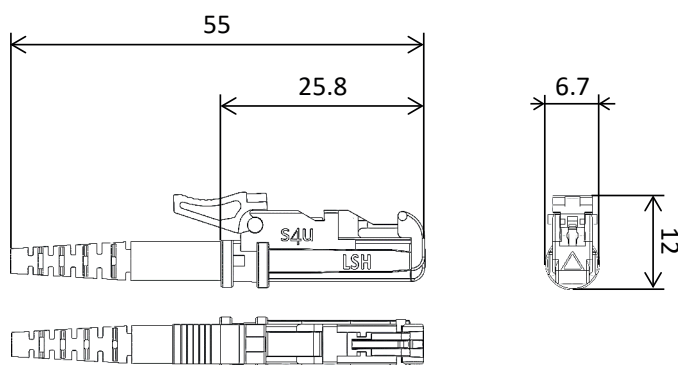
LSH Connector

Order information

Order Code	Description	Color	Packing
CO-LSH-APC	Fiber Optic Connector LSH/SM APC Simplex	green	200
CO-LSH-APC-01DB	Fiber Optic Connector LSH/SM APC Simplex, 0.1dB	green	200
CO-LSH-APC-1255	Fiber Optic Connector LSH/SM APC Simplex, large bore ferrule	green	200
CO-LSH-UPC	Fiber Optic Connector LSH/SM UPC Simplex	blue	200
CO-LSH-MM-BGE	Fiber Optic Connector LSH/MM Simplex	beige	200
CO-LSH-MM-BLK	Fiber Optic Connector LSH/MM Simplex	black	200

LSH Lever and housing

Order information

Order Code	Description	Color	Packing
CO-LSH-LEV-GRN	Lever LSH connector, green	green	500
CO-LSH-LEV-BLU	Lever LSH connector, blue	blue	500
CO-LSH-LEV-BGE	Lever LSH connector, beige	beige	500
CO-LSH-LEV-RED	Lever LSH connector, red	red	500
CO-LSH-LEV-YEL	Lever LSH connector, yellow	yellow	500
CO-LSH-LEV-ORA	Lever LSH connector, orange	orange	500
CO-LSH-LEV-VIO	Lever LSH connector, violet	violet	500
CO-LSH-LEV-BLK	Lever LSH connector, black	black	500
CO-LSH-LEV-AQU	Lever LSH connector, aqua	aqua	500

Data Sheet s4u® LSH Simplex Adapter

Numerous applications

Fiber Optic Backbones, CATV and FTTH Networks, Data Centers, High Power Optical Amplifiers

Unique features

- low loss mating with excellent repeatability
- high return loss connection
- robust design with reliable locked push-pull mechanism
- automatically closing metallic laser beam shutter for safety up to 3W
- replaceable frames with color coding or keying options
- semi-transparent dust caps for laser-beam channel-identification
- fully compatible to E-2000 connectors
- Swisscom approved

Specifications

Compliance	IEC 61754-15, TIA 604-16, RoHS
Alignment technology	full ceramic sleeve
Operating temperature	−40°C to +85°C
Flammability	UL94 V-0
Durability	> 1000 mating cycles
IL repeatability	< 0.1dB
Swisscom approved	according to „Spezifikation optische Verbindungskabel V4.0"

LSH Simplex Adapter with plastic flange and integrated M2 screw nuts
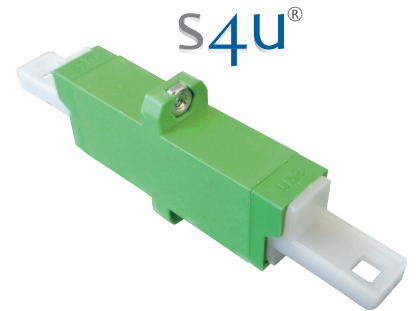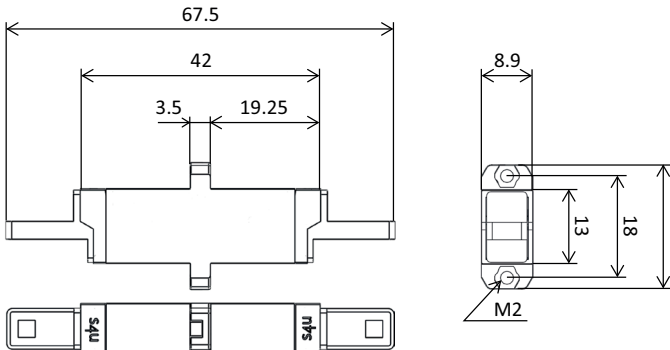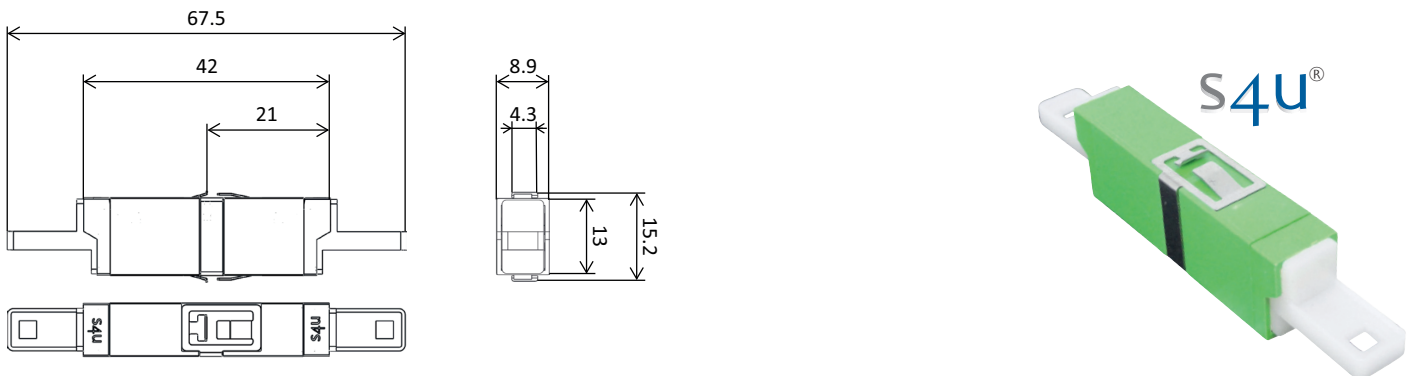
Order information

Order code	Description	Color	Packing
AD-LSH-SX-APC-S	LSH APC Adapter, with flange and screw nuts for panel fixation	green	100
AD-LSH-SX-UPC-S	LSH UPC Adapter, with flange and screw nuts for panel fixation	blue	100
AD-LSH-SX-BGE-S	LSH MM Adapter, with flange and screw nuts for panel fixation	beige	100
AD-LSH-SX-BLK-S	LSH MM Adapter, with flange and screw nuts for panel fixation	black	100

Simplex Adapter Frames

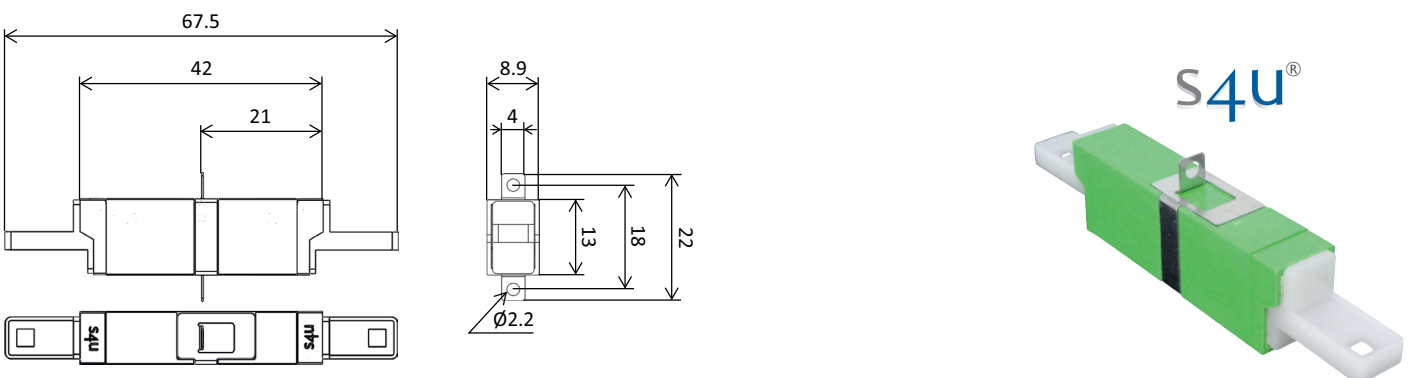| Order code	Description	Color	Packing
FRM-LSH-GRN	Frame LSH Adapter Simplex	green	500
FRM-LSH-RED	Frame LSH Adapter Simplex	red	500
FRM-LSH-YEL	Frame LSH Adapter Simplex	yellow	500
FRM-LSH-ORA	Frame LSH Adapter Simplex	orange	500
FRM-LSH-VIO	Frame LSH Adapter Simplex	violet	500
FRM-LSH-BGE	Frame LSH Adapter Simplex	beige	500
FRM-LSH-BLU	Frame LSH Adapter Simplex	blue	500
FRM-LSH-BLK	Frame LSH Adapter Simplex	black	500
FRM-LSH-AQU	Frame LSH Adapter Simplex	aqua	500

LSH Simplex Adapter Modular: short flange for snap mount

Order information

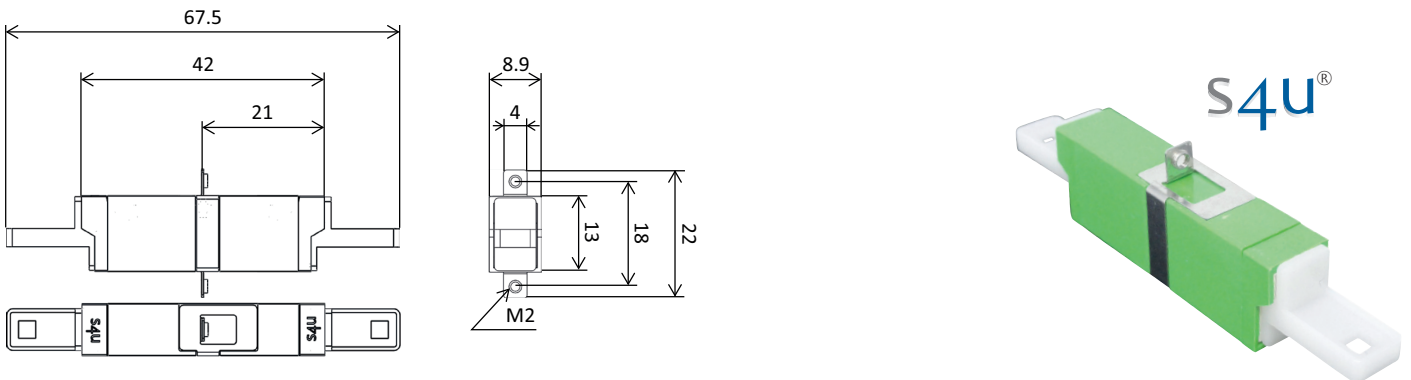| Order code	Description	Color	Packing
AD-LSH-SX-SFM-APC	LSH APC Simplex Adapter Modular, short flange	green	100
AD-LSH-SX-SFM-UPC	LSH UPC Simplex Adapter Modular, short flange	blue	100
AD-LSH-SX-SFM-BGE	LSH MM Simplex Adapter Modular, short flange	beige	100
AD-LSH-SX-SFM-BLK	LSH MM Simplex Adapter Modular, short flange	black	100

LSH Simplex Adapter Modular: 2 holes for screw mount

Order information

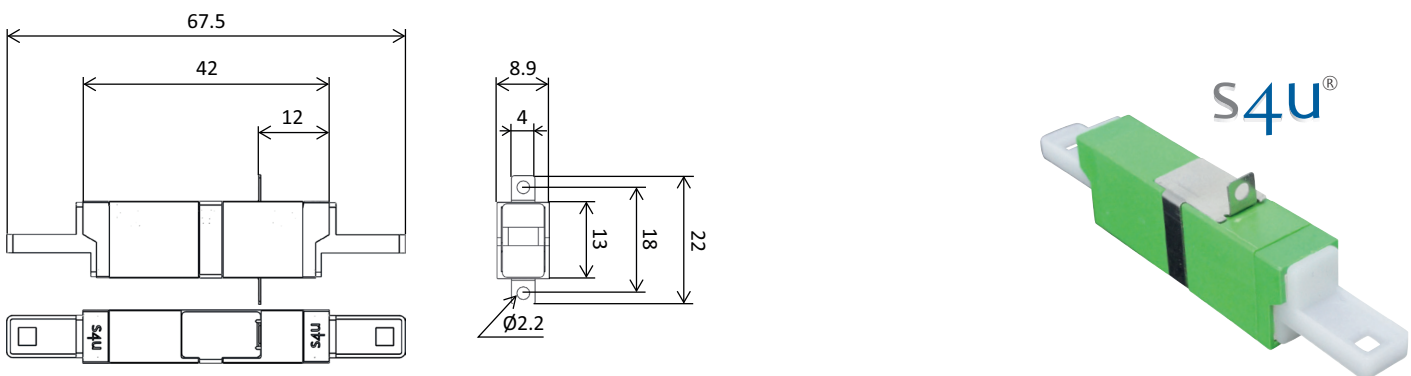| Order code	Description	Color	Packing
AD-LSH-SX-2HM-APC	LSH APC Simplex Adapter Modular, 2-hole flange for screw mount	green	100
AD-LSH-SX-2HM-UPC	LSH UPC Simplex Adapter Modular, 2-hole flange for screw mount	blue	100
AD-LSH-SX-2HM-BGE	LSH MM Simplex Adapter Modular, 2-hole flange for screw mount	beige	100
AD-LSH-SX-2HM-BLK	LSH MM Simplex Adapter Modular, 2-hole flange for screw mount	black	100

LSH Simplex Adapter Modular: 2 threads (M2) for screw mount

Order information

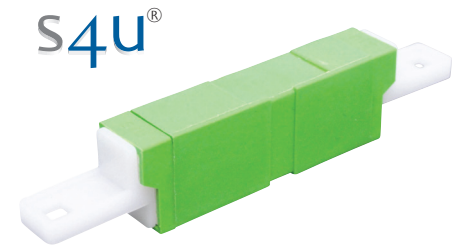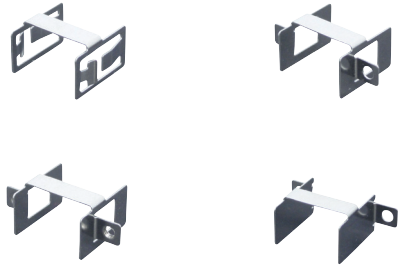| Order code	Description	Color	Packing
AD-LSH-SX-2TM-APC	LSH APC Simplex Adapter Modular, M2-thread flange	green	100
AD-LSH-SX-2TM-UPC	LSH UPC Simplex Adapter Modular, M2-thread flange	blue	100
AD-LSH-SX-2TM-BGE	LSH MM Simplex Adapter Modular, M2-thread flange	beige	100
AD-LSH-SX-2TM-BLK	LSH MM Simplex Adapter Modular, M2-thread flange	black	100

LSH Simplex Adapter Modular: recessed flange with 2 holes for screw mount

Order information

Order code	Description	Color	Packing
AD-LSH-SX-2HR-APC	LSH APC Simplex Adapter Modular, recessed 2-hole flange	green	100
AD-LSH-SX-2HR-UPC	LSH UPC Simplex Adapter Modular, recessed 2-hole flange	blue	100
AD-LSH-SX-2HR-BGE	LSH MM Simplex Adapter Modular, recessed 2-hole flange	beige	100
AD-LSH-SX-2HR-BLK	LSH MM Simplex Adapter Modular, recessed 2-hole flange	black	100

LSH Simplex Adapter Modular:
separate flange for individual assembling

s4u®

Order information

Order code	Description	Color	Packing
AD-LSH-SX-MOD-APC	LSH APC Simplex Adapter Modular, without flange, M2 screws	green	100
AD-LSH-SX-MOD-UPC	LSH UPC Simplex Adapter Modular, without flange, M2 screws	blue	100
AD-LSH-SX-MOD-BGE	LSH MM Simplex Adapter Modular, without flange, M2 screws	beige	100
AD-LSH-SX-MOD-BLK	LSH MM Simplex Adapter Modular, without flange, M2 screws	black	100
FLA-LSH-SX-SFM	Flange for LSH Adapter Simplex Modular, short	metal	200
FLA-LSH-SX-2HM	Flange for LSH Adapter Simplex Modular, 2 hole	metal	200
FLA-LSH-SX-2TM	Flange for LSH Adapter Simplex Modular, M2 threads	metal	200
FLA-LSH-SX-2HR	Flange for LSH Adapter Simplex Modular, 2 holes recessed	metal	200

LSH Duplex Compact Adapter

Numerous applications

Fiber Optic Backbones, CATV and FTTH Networks, Data Centers, High Power Optical Amplifiers

Unique features

- compact size for dense packing, RJ45 panels compatible
- low loss mating with excellent repeatability
- high return loss connection
- robust design with reliable locked push-pull mechanism
- automatically closing metallic laser beam shutter for safety up to 3W
- semi-transparent dust caps for laser-beam channel-identification
- fully compatible to E-2000 connectors
- Swisscom approved

Specifications

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Compliance	IEC 61754-15, TIA 604-16, RoHS
Alignment technology	full ceramic sleeve
Operating temperature	−40°C to +85°C
Flammability	UL94 V-0
Durability	> 1000 mating cycles
IL repeatability	< 0.1dB

LSH Duplex Compact Adapter: short flange for snap mount

67.5
42
21

14.7
10.5
5
12.8
16.2

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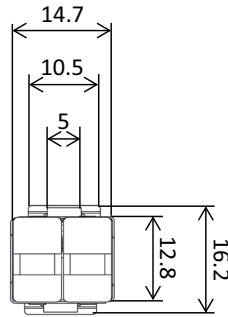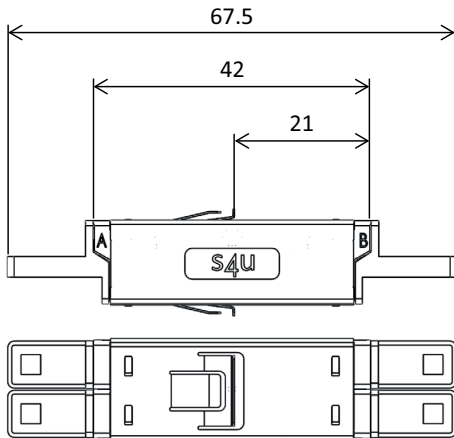
Order information

Order code	Description	Color	Packing
AD-LSH-DX-APC-SF	LSH APC Duplex Compact Adapter, short flange for snap mount	green	100
AD-LSH-DX-UPC-SF	LSH UPC Duplex Compact Adapter, short flange for snap mount	blue	100
AD-LSH-DX-BGE-SF	LSH MM Duplex Compact Adapter, short flange for snap mount	beige	100
AD-LSH-DX-BLK-SF	LSH MM Duplex Compact Adapter, short flange for snap mount	black	100

LSH Duplex Compact Adapter: integrated M2-threads for screw mount

67.5
42
21

14.7
7
12.8
18
21.6
M2

A   S4U   B
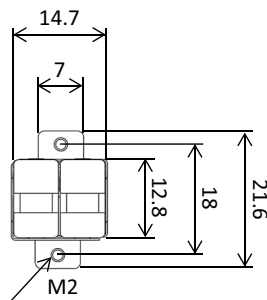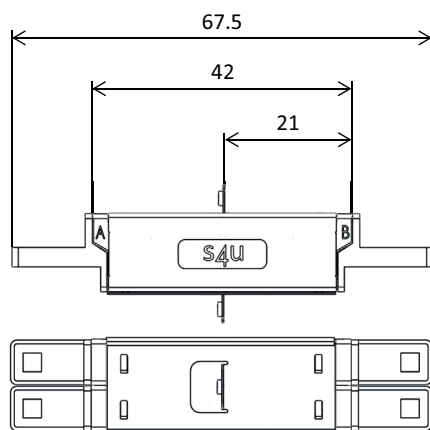
Order information

Order code	Description	Color	Packing
AD-LSH-DX-APC-2T	LSH APC Duplex Compact Adapter, short flange for snap mount	green	100
AD-LSH-DX-UPC-2T	LSH UPC Duplex Compact Adapter, short flange for snap mount	blue	100
AD-LSH-DX-BGE-2T	LSH MM Duplex Compact Adapter, short flange for snap mount	beige	100
AD-LSH-DX-BLK-2T	LSH MM Duplex Compact Adapter, short flange for snap mount	black	100

Data Sheet s4u® LSH Pigtails

Numerous applications

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

Unique features

- fully compatible to E-2000 products
- bend limiting boots
- meets Telcordia GR-0326-CORE requirements for high-density applications
- short rigid lengths
- metallic automatic shutter
- Pigtail-sets with 12 or 24 fibers
- color options for lever, housing and boot

Specifications

Compliance	IEC 61754-15, TIA 604-16, RoHS
Alignment technology	Full ceramic ferrule (Zirconia ZrO2)
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: > 85dB Singlemode UPC: > 50dB Multimode: > 35dB
Cable types	0.6 or 0.9mm easy-strip (12 colors + 12 colors dashed) 0.6 or 0.9mm tight-tube
Connector end face geometry	IEC 61755-3
Tuning	IEC 61755-3-2