

ENGINEERING SELECTION

SC/APC Field Connector Selection

Choose cable fit, termination method and the operating envelope together with optical performance.

Model	Published cable fit	APC RL	Operating range
CX-SC-G50	2 × 3 mm flat drop	≥55 dB	-20 to +75 °C
CPX-LX11-B	2 × 3 or 2 × 5 mm flat drop	≥50 dB	-20 to +75 °C
CX-SC-G58-ANT	0.9 mm fiber; 2 / 3 mm round; 2 × 3 mm flat	≥55 dB	-20 to +75 °C

Cable dimensions are a selection input

A 2 × 3 mm profile corresponds to 3 × 2 mm when the same cross-section is described in the opposite order. A 2 × 5 mm listing does not establish compatibility with 3 × 5 mm cable. Check the actual clamp, boot, cable drawing and retention requirement.

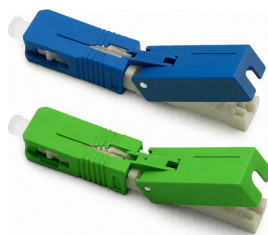
Check before selection	Evidence to request
Optical limits	The featured mechanical models list average IL ≤0.3 dB and maximum ≤0.5 dB. Confirm APC return loss for the exact variant and test wavelengths.
Mechanical retention	Request the retention test for the selected cable size and connector. Mating durability is not cable pull-out strength.
Operating envelope	If an installation requires -25 °C, the published -20 °C minimum does not cover it. Request a documented suitable configuration.
Preparation and tooling	Specify strip length, cleave length, cable version and compatible assembly tools. Fusion splice-on is a separate termination method.

Model selection identifies a candidate product. Customer qualification requires the specified variant, supporting test evidence and acceptance of the evaluated sample.

PRODUCT FAMILY

Connectors and Adapters

Choose the termination method and mating interface as a complete connection. Mechanical, fusion and protected formats are complemented by panel and hybrid adapters.



Mechanical field connectors

SC, LC and FC configurations matched to the cable and preparation method.



Protected interfaces

Mini-SC and hardened SC bodies with configuration-specific seals.



Splice-on connectors

Connector bodies with the fiber splice and protection inside.



Optical adapters

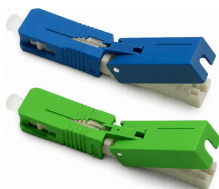
SC, LC, FC, ST and hybrid options for panels and equipment.

Selection	Configure around
Interface	Connector format, fiber mode, polish and exact mating geometry
Termination	Mechanical or fusion method, cable/buffer size, holder and tools
Panel integration	Simplex, duplex or quad layout; flange, shutter, cutout and clearance

FEATURED CONFIGURATION / CX-SC-G50 / CPX-LX11-B

SC Field Assembly Connectors

Mechanical fiber alignment and a factory pre-polished ferrule for flat FTTH drop cable.



CX-SC-G50



CPX-LX11-B

Specification	CX-SC-G50	CPX-LX11-B
Interface / fiber	SC/UPC or SC/APC; singlemode	SC/UPC or SC/APC; singlemode
Body length	51 mm	50 mm
Flat drop cable	2 × 3 mm	2 × 3 mm or 2 × 5 mm
Insertion loss	Average ≤ 0.3 dB; max. ≤ 0.5 dB	Average ≤ 0.3 dB; max. ≤ 0.5 dB
Return loss, UPC	≥ 50 dB	≥ 45 dB
Return loss, APC	≥ 55 dB	≥ 50 dB
Mating durability	≥ 500 cycles	≥ 500 cycles
Operating temperature	−20 to +75 °C	−20 to +75 °C
Storage temperature	−40 to +85 °C	−40 to +85 °C
Typical termination time	≤ 2 minutes	≤ 2 minutes
Standard packaging	100 pieces; bag or blister box	100 pieces; bag or blister box

Typical termination time depends on preparation, tooling and installer technique. For outdoor use, install standard SC connectors within a suitable protective enclosure. Verify cable fit and polish; model names do not specify length.

FEATURED CONFIGURATION / CX-SC-G58-ANT

SC Mechanical Field Connector

CX-SC-G58-ANT: mechanical field termination for the selected cable or buffered-fiber version.



Specification	Details
Interface	Single-mode SC/APC or SC/UPC
Connector length	58 mm
Insertion loss	Average ≤ 0.3 dB; maximum ≤ 0.5 dB
Return loss	UPC ≥ 50 dB; APC ≥ 55 dB
Mating durability	≥ 500 cycles
Fiber / cable profiles	0.9 mm buffered fiber; 2.0 / 3.0 mm round cable; 2.0 × 3.0 mm flat drop cable
Typical termination time	≤ 2 minutes
Operating / storage temperature	-20 to +75 °C / -40 to +85 °C
Color identification	Green APC; blue UPC
Packing	Bag or blister box; standard pack of 100 pieces

Select the cable version and APC or UPC interface. Prepare the fiber with matched stripping, precision cleaving and cleaning tools.

FEATURED CONFIGURATION / CX-SC-FST

SC Fusion Splice-On Connector

CX-SC-FST: a fusion splice protected inside the connector housing.



Specification	Details
Interface	Single-mode SC/APC or SC/UPC
Termination method	Fusion splice within the connector housing
Connector length	55.4 ±1 mm, with dust cap
Fiber preparation	0.9 mm buffered-fiber configuration
Insertion loss	≤0.3 dB
Return loss	UPC ≥50 dB; APC ≥55 dB
Operating temperature	–20 to +75 °C
Storage temperature	–40 to +85 °C
Color identification	Green APC; blue UPC
Included protection	One heat-shrink splice sleeve per connector
Packing	Bag or blister box; standard pack of 100 pieces

Verify the selected holder, fusion-splicer setup and fiber preparation. Use the supplied splice-protection sleeve.

SC W / R / T / G

SC Mechanical Body Selection

Body length, cable orientation and retention style by configuration reference.



LX-W01



LX-R19



LX-T18

Configuration reference	Length	Configuration detail
LX-W01	60 mm	Horizontal flat-cable orientation
LX-W02	53 mm	Horizontal flat-cable orientation
LX-R03	53 mm	R-series configuration
LX-R04 / R05	50 mm	Two distinct R-series configurations
LX-R06	50 mm	Nut-type configuration
LX-R19	45 mm	Short R-series body
LX-R20	51 mm	R-series configuration
LX-R21	53 mm	R-series configuration
LX-T13	53 mm	Cover-clamp configuration
LX-T18	58 mm	Nut-type configuration
LX-G55	55 mm	G-series configuration
LX-G56	50 mm	G-series configuration

APC and UPC variants are available in this group.

SC STANDARD

Standard SC Configurations

Horizontal and vertical flat-cable arrangements are listed separately where specified.



LX-01-A



LX-01-B



LX-11-A

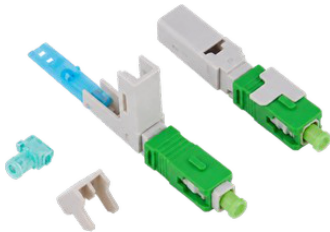
Configuration reference	Length	Configuration detail
LX-01-A	60 mm	Horizontal flat-cable orientation
LX-01-B	60 mm	Vertical flat-cable orientation
LX-01-C	55 mm	Vertical flat-cable orientation
LX-02-A	53 mm	Horizontal flat-cable orientation
LX-02-B	53 mm	Vertical flat-cable orientation
LX-04-A	50 mm	Horizontal flat-cable orientation
LX-04-B	50 mm	Vertical flat-cable orientation
LX-07-A	50 mm	Standard SC configuration
LX-09-A / 09-B	52 mm	Two distinct SC configurations
LX-10	50 mm	Standard SC configuration
LX-11-A	53 mm	Standard SC configuration
LX-11-B	50 mm	CPX-LX11-B model specification in this catalog
LX-14	52 mm	Standard SC configuration

APC and UPC variants are available in this group.

SC DRAWER / Z

Drawer and Z Configurations

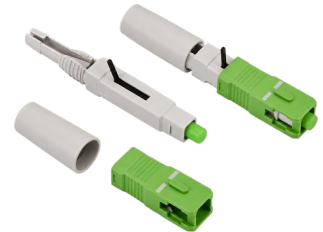
Additional SC bodies for a consistent field assembly and preparation workflow.



LX-DR12-A



LX-DR15



LX-Z31

Configuration reference	Length	Family
LX-DR12-A	52 mm	Drawer
LX-DR12-B	52 mm	Drawer
LX-DR15	52 mm	Drawer
LX-DR16	52 mm	Drawer
LX-DR17	52 mm	Drawer
LX-Z31	53 mm	Z
LX-Z32	53 mm	Z
LX-Z33	53 mm	Z
LX-Z34	53 mm	Z
LX-Z35	53 mm	Z
LX-Z36	53 mm	Z

APC and UPC variants are available in this group.

CONNECTORS AND ADAPTERS

LC, FC and Fusion Connector Formats

Select the interface and termination method together with the actual cable or buffered-fiber version.

LC and FC Mechanical Connectors



LX-LC-A



LX-LC-E



LX-FC

Configuration reference	Length	Cable / construction
LX-LC-A	44 mm	LC drop-cable version
LX-LC-D	45 mm	LC general configuration; cable fit to be specified
LX-LC-E	47 mm	LC round-cable version
LX-LC-F	44 mm	LC 0.9 mm version
LX-FC	55 mm	FC mechanical clamp design

Fusion Splice On Configurations



RS58



RL09



FC

Configuration reference	Interface	Stated dimension / version
RS58	SC	58 mm connector length
RS09	SC	0.9 mm version
RL09	LC	0.9 mm version
FC splice-on	FC	55 mm connector length

APC and UPC variants are available in this group.

The 0.9 mm designation identifies a fiber/cable version, not the body length. Confirm holder, tooling and splice protection separately.

CONNECTORS AND ADAPTERS

Protected SC Interface Families

Mini-SC and hardened SC are separate housing families. Match the port geometry, termination method and cable seal explicitly.

Mini SC Protected Interfaces



Mini-SC L02



Mini-SC L09



Mini-SC splice-on

Configuration reference	Termination	Cable sizes listed (mm)
Mini-SC L02	Mechanical	Round: 2.0, 3.0, 5.0 Flat: 2 × 1.6, 2 × 3, 2 × 5
Mini-SC L04	Mechanical	Round: 2.0, 3.0, 5.0 Flat: 2 × 1.6, 2 × 3, 2 × 5
Mini-SC L09	Mechanical	Flat: 2 × 1.6, 2 × 3, 2 × 5
Mini-SC L21	Mechanical	Round: 2.0, 3.0, 5.0 Flat: 2 × 1.6, 2 × 3, 2 × 5
Mini-SC G55	Mechanical	Round: 5.0
Mini-SC splice-on	Fusion	Round: 2.0, 3.0, 5.0 Flat: 2 × 1.6, 2 × 3, 2 × 5

Hardened SC Protected Interfaces



Hardened SC L02



Hardened SC L09



Hardened SC splice-on

Configuration reference	Termination	Cable sizes listed (mm)
Hardened SC L02	Mechanical	Round: 2.0, 3.0, 5.0 Flat: 2 × 1.6, 2 × 3, 2 × 5
Hardened SC L04	Mechanical	Round: 2.0, 3.0, 5.0 Flat: 2 × 1.6, 2 × 3, 2 × 5
Hardened SC L09	Mechanical	Flat: 2 × 1.6, 2 × 3, 2 × 5
Hardened SC L21	Mechanical	Round: 2.0, 3.0, 5.0 Flat: 2 × 1.6, 2 × 3, 2 × 5
Hardened SC G55	Mechanical	Round: 5.0
Hardened SC splice-on	Fusion	Round: 2.0, 3.0, 5.0 Flat: 2 × 1.6, 2 × 3, 2 × 5

APC and UPC variants are available in this group.

Cable sizes describe different seal variants; a single seal does not necessarily accept every size. Confirm ingress protection on the complete matched assembly. No universal terminal compatibility is claimed.

FACTORY TERMINATION

Factory Termination and Splice Options

Specify the end assembly and supply format for the installation program.



Factory Mini-SC



90 mm ceramic splice



3-in-1 SC assembly

Additional option	Stated configuration
Factory-terminated Mini-SC	2 × 3 mm or 2 × 5 mm flat cable
Factory-terminated hardened SC	2 × 3 mm or 2 × 5 mm flat cable
3-in-1 SC assembly	APC and UPC versions; interface and cable fit to be specified
Mechanical splice	90 mm; ceramic and metal versions

CONNECTORS AND ADAPTERS

SC and LC Optical Adapters

Match port density, panel retention and connector access with the optical connection.

SC configurations



SC simplex

SC duplex

Shuttered SC

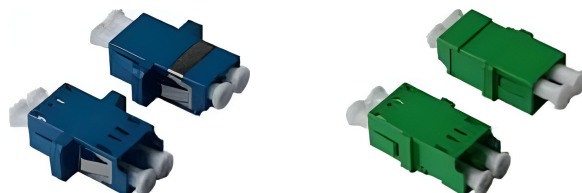
Selection	Configuration options
Port arrangement	Simplex and duplex bodies for the required connection count.
Panel mounting	Flanged or flangeless designs, metal clips, push-in and selected four-claw retention formats.
Body construction	One-piece and split-body variants to suit the mechanical arrangement.
Port access	Dust-cap and selected shuttered formats.
Network match	Single-mode or multimode variants; PC or APC configuration as specified.

Select the complete mounting arrangement

Confirm connector format, fiber mode and polish compatibility before choosing color. The panel cutout and thickness determine retention; port spacing and rear connector clearance determine access.

For repeat supply, keep housing, sleeve, clip, dust cap and color in the approved specification. Provide a drawing or sample enclosure and the required insertion-loss and return-loss acceptance limits.

LC configurations



LC adapter formats

Shuttered LC

Selection	Configuration options
Port arrangement	Simplex, duplex and quad formats.
Panel integration	Flanged or flangeless; one-piece or split-body designs.
Housing geometry	Selected high-low and asymmetric housing options.
Fiber and polish	Single-mode and multimode options; select the required mating and polish configuration.
Completion details	Sleeve, housing color, clips, dust caps and packing matched to the selected variant.

Port density with usable access

Choose the footprint with the panel drawing, fiber count and connector access in view. Specify whether dust shutters are required and verify clearance for the selected latch and boot.

Mechanical choices do not establish optical performance. Agree the sleeve specification, insertion loss, return loss and sample acceptance criteria for the exact assembly.

OPTICAL ADAPTERS / OTHER INTERFACES

FC ST and Hybrid Adapters

Interface options for installed equipment and mixed connector formats.



ST adapter



Hybrid interface

Family	Available examples	Selection focus
FC	Threaded bodies; selected large-D and small-D formats	Thread/key details, cutout, panel thickness and fiber compatibility.
ST	Bayonet formats; selected duplex arrangements	Bayonet fit, body dimensions and mounting arrangement.
SC hybrids	FC-SC, SC-ST and SC-LC	Connector formats and compatible end-face geometry on both sides.
LC hybrids	LC-FC, LC-ST and LC-E2000	Housing clearance, retention and the exact interface combination.
Other hybrids	FC-ST and SMA905-FC	Application-specific interface and fiber requirements.

A hybrid adapter changes connector format. It does not convert single-mode fiber to multimode or make incompatible connector polishes suitable for mating.

Inquiry item	Required detail
Connector pair and fiber	Identifies the adapter family, mode and required polish compatibility.
Port count and dimensions	Defines simplex, duplex or quad layout, cutout and clearances.
Optical acceptance criteria	Sets required insertion loss, return loss and sleeve specification.
Quantity and supply format	Aligns bulk, panel-assembly or branded packing with the program.