CORNIX

PRODUCT FAMILY DATASHEET

CNX-DS-F63-000 · REV 1.0 · 06 OCTOBER 2026

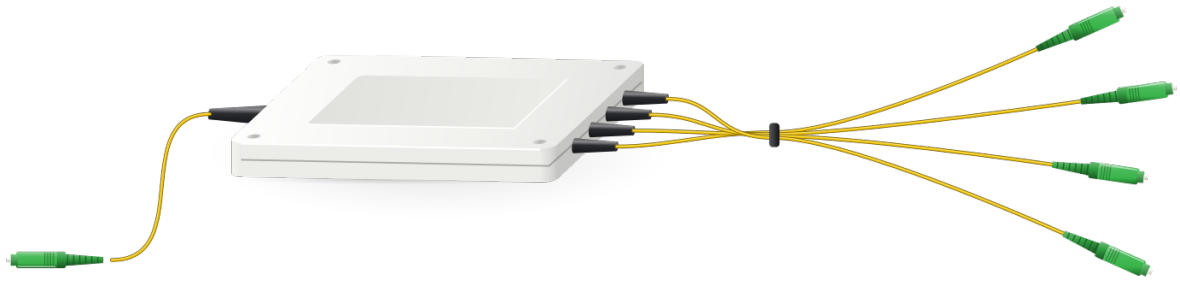
PASSIVE OPTICAL COMPONENTS

PLC Fiber Splitter

PLANAR LIGHTWAVE CIRCUIT · 1×N · SC/APC · G.657.A1

FAMILY **F63 • 10 PART NUMBERS**

SHOWN: CX-FSP-PLC-1X4-SC-APC-BOX



1×4	≤ 7.4 dB	≤ 0.7 dB	1260 – 1650 nm
SPLIT RATIO	INSERTION LOSS	UNIFORMITY	OPERATING WAVELENGTH

OVERVIEW

Planar lightwave circuit (PLC) splitters developed to divide one optical input evenly across multiple outputs in passive optical networks (PON), FTTH distribution points and CATV overlays. Connectorized with SC/APC.

- Planar lightwave circuit technology
- Low insertion loss and excellent uniformity
- 1260–1650 nm operating window
- SC/APC connectorized, ABS box or LGX cassette
- Serial number and test report per unit

APPLICATIONS

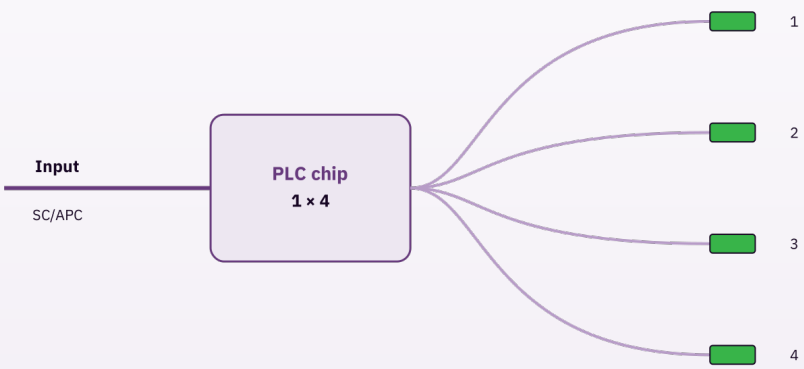
- GPON / XGS-PON distribution
- FTTH splitter points and distribution boxes
- CATV / RF-video overlay

STANDARDS & COMPLIANCE

Telcordia GR-1209 · GR-1221 · RoHS compliant

Common Specifications

Values shared by all 10 part numbers in this family · variant-specific values on the following page



Outputs: 4 × SC/APC — ABS box with 2.0 mm pigtails

OPTICAL SCHEMATIC — SHOWN FOR CX-FSP-PLC-1X4-SC-APC-BOX

GENERAL

Connectors	**SC/APC (input and outputs)**

OPTICAL CHARACTERISTICS

Fiber	**ITU-T G.657.A1**

OPTICAL PERFORMANCE

Operating wavelength	**1260 – 1650 nm**
Return loss	**≥ 50 dB**
Directivity	**≥ 55 dB**

ENVIRONMENTAL

Operating / storage temperature	**-40 °C to +85 °C**

Ordering Information

10 part numbers · individual datasheets available for every part number

Part number	Description	Split ratio	Connectors	Fiber	Housing
ABS box splitters					
CX-FSP-PLC-1X2-SC-APC-BOX	PLC Fiber Splitter, ABS Box, 1×2, SC/APC	1×2	SC/APC	G.657.A1	ABS box
CX-FSP-PLC-1X4-SC-APC-BOX	PLC Fiber Splitter, ABS Box, 1×4, SC/APC	1×4	SC/APC	G.657.A1	ABS box
CX-FSP-PLC-1X8-SC-APC-BOX	PLC Fiber Splitter, ABS Box, 1×8, SC/APC	1×8	SC/APC	G.657.A1	ABS box
CX-FSP-PLC-1X16-SC-APC-BOX	PLC Fiber Splitter, ABS Box, 1×16, SC/APC	1×16	SC/APC	G.657.A1	ABS box
CX-FSP-PLC-1X32-SC-APC-BOX	PLC Fiber Splitter, ABS Box, 1×32, SC/APC	1×32	SC/APC	G.657.A1	ABS box
LGX cassette splitters					
CX-FSP-PLC-1X2-SC-APC-LGX	PLC Fiber Splitter, LGX Cassette, 1×2, SC/APC	1×2	SC/APC	G.657.A1	LGX cassette
CX-FSP-PLC-1X4-SC-APC-LGX	PLC Fiber Splitter, LGX Cassette, 1×4, SC/APC	1×4	SC/APC	G.657.A1	LGX cassette
CX-FSP-PLC-1X8-SC-APC-LGX	PLC Fiber Splitter, LGX Cassette, 1×8, SC/APC	1×8	SC/APC	G.657.A1	LGX cassette
CX-FSP-PLC-1X16-SC-APC-LGX	PLC Fiber Splitter, LGX Cassette, 1×16, SC/APC	1×16	SC/APC	G.657.A1	LGX cassette
CX-FSP-PLC-1X32-SC-APC-LGX	PLC Fiber Splitter, LGX Cassette, 1×32, SC/APC	1×32	SC/APC	G.657.A1	LGX cassette

Variant-Specific Specifications

Values that differ between part numbers

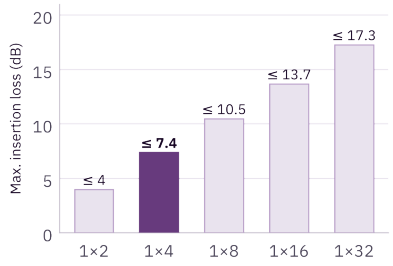
Part number	Insertion loss	Uniformity	Polarization-dependent loss
CX-FSP-PLC-1X2-SC-APC-BOX	≤ 4.0 dB	≤ 0.4 dB	≤ 0.2 dB
CX-FSP-PLC-1X4-SC-APC-BOX	≤ 7.4 dB	≤ 0.7 dB	≤ 0.3 dB
CX-FSP-PLC-1X8-SC-APC-BOX	≤ 10.5 dB	≤ 0.8 dB	≤ 0.3 dB
CX-FSP-PLC-1X16-SC-APC-BOX	≤ 13.7 dB	≤ 1.2 dB	≤ 0.3 dB
CX-FSP-PLC-1X32-SC-APC-BOX	≤ 17.3 dB	≤ 1.7 dB	≤ 0.3 dB
CX-FSP-PLC-1X2-SC-APC-LGX	≤ 4.0 dB	≤ 0.4 dB	≤ 0.2 dB
CX-FSP-PLC-1X4-SC-APC-LGX	≤ 7.4 dB	≤ 0.7 dB	≤ 0.3 dB
CX-FSP-PLC-1X8-SC-APC-LGX	≤ 10.5 dB	≤ 0.8 dB	≤ 0.3 dB
CX-FSP-PLC-1X16-SC-APC-LGX	≤ 13.7 dB	≤ 1.2 dB	≤ 0.3 dB
CX-FSP-PLC-1X32-SC-APC-LGX	≤ 17.3 dB	≤ 1.7 dB	≤ 0.3 dB

Part number	Housing	Pigtails
CX-FSP-PLC-1X2-SC-APC-BOX	ABS box module	2.0 mm loose tube, G.657.A1
CX-FSP-PLC-1X4-SC-APC-BOX	ABS box module	2.0 mm loose tube, G.657.A1
CX-FSP-PLC-1X8-SC-APC-BOX	ABS box module	2.0 mm loose tube, G.657.A1
CX-FSP-PLC-1X16-SC-APC-BOX	ABS box module	2.0 mm loose tube, G.657.A1
CX-FSP-PLC-1X32-SC-APC-BOX	ABS box module	2.0 mm loose tube, G.657.A1
CX-FSP-PLC-1X2-SC-APC-LGX	LGX cassette, metal, light grey; front SC/APC adapter panel	—
CX-FSP-PLC-1X4-SC-APC-LGX	LGX cassette, metal, light grey; front SC/APC adapter panel	—
CX-FSP-PLC-1X8-SC-APC-LGX	LGX cassette, metal, light grey; front SC/APC adapter panel	—
CX-FSP-PLC-1X16-SC-APC-LGX	LGX cassette, metal, light grey; front SC/APC adapter panel	—
CX-FSP-PLC-1X32-SC-APC-LGX	LGX cassette, metal, light grey; front SC/APC adapter panel	—

Performance

Shown for CX-FSP-PLC-1X4-SC-APC-BOX

INSERTION LOSS BY SPLIT RATIO



Highlighted: this product. Excluding connector loss.

OPERATING WAVELENGTH WINDOW



Covers ITU-T O- to L-bands — GPON, XGS-PON and RF-video overlay.

TEMPERATURE RANGE



INDIVIDUAL TEST REPORT — SERIAL-NUMBERED UNITS

SERIAL & TEST REPORT

Test item	Requirement	Recorded
Insertion loss, every output port	≤ 7.4 dB	Per port
Uniformity	≤ 0.7 dB	Per unit
Polarization-dependent loss	≤ 0.3 dB	Per unit
Return loss / directivity	≥ 50 dB / ≥ 55 dB	Per unit

Each splitter carries a unique serial number and is shipped with its own port-by-port test report.

Request a quote or technical support

Datasheets, test reports and samples available on request

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sales@cornixglobal.com
cornixglobal.com

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