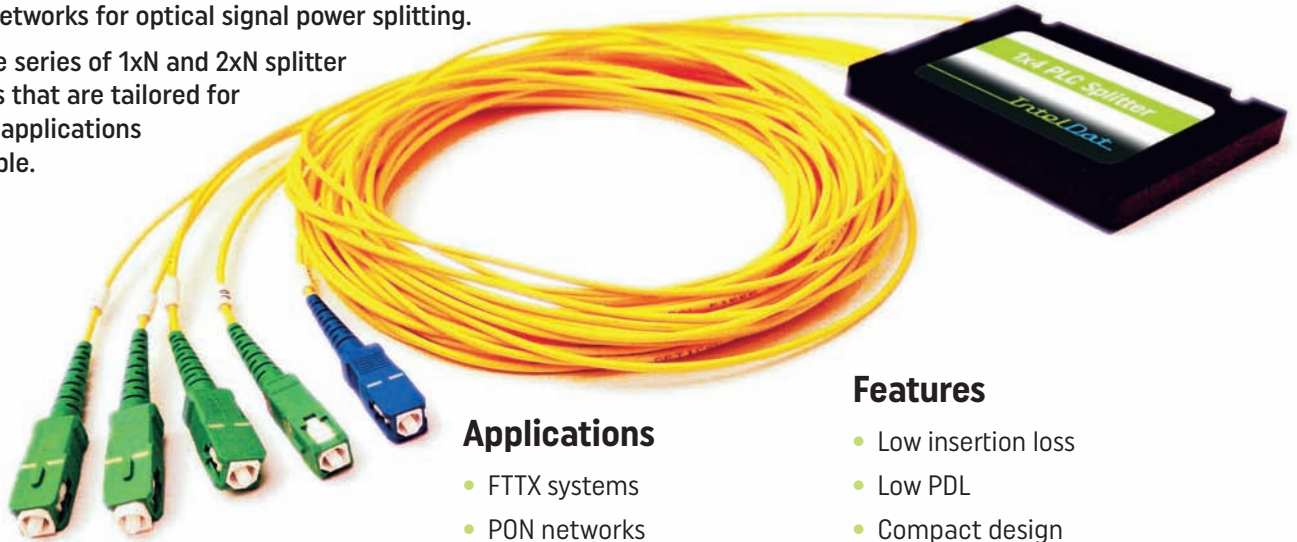


DSSP PLC Splitters for FTTX Applications

Our DSSP Planar Lightwave Circuit (PLC) splitter is an optical power management device fabricated using silica optical waveguide technology. It features small size, high reliability, wide operating wavelength range and good channel-to-channel uniformity, and is widely used in PON networks for optical signal power splitting.

An entire series of 1xN and 2xN splitter products that are tailored for specific applications is available.



Applications

- FTTX systems
- PON networks
- CATV links
- Optical signal distribution

Features

- Low insertion loss
- Low PDL
- Compact design
- Good channel-to-channel uniformity
- High reliability and stability

Specifications

| 1×N PLC Splitter Parameters | 1×2 | 1×4 | 1×8 | 1×16 | 1×32 | 1×64 |
|--|-------------------------------|-----------|-----------|-----------|------------|------------|
| Operating Wavelength (nm) | 1260~1650 | | | | | |
| Fiber Type | SMF-28e or customer specified | | | | | |
| Insertion Loss (dB) (S/P Grade) | 4.0/3.8 | 7.3/7.0 | 10.5/10.2 | 13.7/13.5 | 16.9/16.7 | 21.0/20.5 |
| Loss Uniformity (dB) | 0.4 | 0.6 | 0.8 | 1.2 | 1.5 | 2.5 |
| Return Loss (dB) (S/P Grade) | 50/55 | 50/55 | 50/55 | 50/55 | 50/55 | 50/55 |
| Polarization Dependent Loss (dB) | 0.2 | 0.2 | 0.2 | 0.25 | 0.3 | 0.4 |
| Directivity (dB) | 55 | 55 | 55 | 55 | 55 | 55 |
| Wavelength Dependent Loss (dB) | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.5 |
| Temperature Stability (-40~85 °C) (dB) | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 |
| Operating Temperature (°C) | -40~85 | | | | | |
| Storage Temperature (°C) | -40~85 | | | | | |
| Bare Fiber Type (steel tube dimension) | 40×4×4 | 40×4×4 | 40×4×4 | 50×7×4 | 50×7×4 | 60×12×4 |
| Steel tube Dimension (mm) | 60×7×4 | 60×7×4 | 60×7×4 | 60×12×4 | 80×20×6 | 80×30×10 |
| ABS Box Dimension (mm) | 100×80×10 | 100×80×10 | 100×80×10 | 120×80×18 | 140×115×18 | 140×115×18 |
| 2×N PLC Splitter Parameters | 2×2 | 2×4 | 2×8 | 2×16 | 2×32 | 2×64 |
| Operating Wavelength (nm) | 1260~1650 | | | | | |
| Fiber Type | G657A or customer specified | | | | | |
| Insertion Loss (dB) (S/P Grade) | 4/3.8 | 7.6/7.4 | 11/10.8 | 14.4/14.2 | 17.5/17 | 21.5/21 |
| Loss Uniformity (dB) | 0.6 | 1.0 | 1.2 | 1.5 | 1.8 | 2.5 |
| Return Loss (dB) (S/P Grade) | 50/55 | 50/55 | 50/55 | 50/55 | 50/55 | 50/55 |
| Polarization Dependent Loss (dB) | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 |
| Directivity (dB) | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| Wavelength Dependent Loss (dB) | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 |
| Temperature Stability (-40~85 °C) (dB) | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 |
| Operating Temperature (°C) | -40~85 | | | | | |
| Storage Temperature (°C) | -40~85 | | | | | |
| Device Dimension (mm) (L×W×H) | 40×4×4 | 50×4×4 | 50×4×4 | 50×7×4 | 60×7×4 | 60×12×4 |
| Mini-Module Dimension (mm) | 60×7×4 | 60×7×4 | 60×7×4 | 60×12×4 | 80×20×6 | N/A |
| Module Dimension (mm) (L×W×H) | 100×80×10 | 100×80×10 | 100×80×10 | 120×80×18 | 141×115×18 | 141×115×18 |

ORDERING CODES

DSSP: PLC Splitters for FTTX Applications

| DS | SP | - | ✓ | - | ✓ | / | ✓ | - | ✓ | ✓ | - | ✓ | - | ✓ | |
|---------|----|---|------|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | Number of Ports |
| 0102 | | | | | | | | | | | | | | | 1x2 |
| 0104 | | | | | | | | | | | | | | | 1x4 |
| 0108 | | | | | | | | | | | | | | | 1x8 |
| 0116 | | | | | | | | | | | | | | | 1x16 |
| 0132 | | | | | | | | | | | | | | | 1x32 |
| 0164 | | | | | | | | | | | | | | | 1x64 |
| 1128 | | | | | | | | | | | | | | | 1x128 |
| 0204 | | | | | | | | | | | | | | | 2x4 |
| 0208 | | | | | | | | | | | | | | | 2x8 |
| 0216 | | | | | | | | | | | | | | | 2x16 |
| 0232 | | | | | | | | | | | | | | | 2x32 |
| 0264 | | | | | | | | | | | | | | | 2x64 |
| 2128 | | | | | | | | | | | | | | | 2x128 |
| | | | | | | | | | | | | | | | Input / Outputs Pigtail Style |
| 0 | | | | | | | | | | | | | | | Bare fiber 250 µm |
| 1 | | | | | | | | | | | | | | | Loose tube 900 µm |
| 2 | | | | | | | | | | | | | | | Tight buffer 900 µm |
| 3 | | | | | | | | | | | | | | | 2.0 mm cable |
| 4 | | | | | | | | | | | | | | | 3.0 mm cable |
| | | | | | | | | | | | | | | | Input / Output Connectors |
| 0 | | | | | | | | | | | | | | | None |
| 1 | | | | | | | | | | | | | | | SC/PC |
| 2 | | | | | | | | | | | | | | | SC/APC |
| 3 | | | | | | | | | | | | | | | FC/PC |
| 4 | | | | | | | | | | | | | | | FC/APC |
| 5 | | | | | | | | | | | | | | | ST |
| 6 | | | | | | | | | | | | | | | LC/PC |
| 7 | | | | | | | | | | | | | | | LC/APC |
| 8 | | | | | | | | | | | | | | | E2000/APC |
| | | | | | | | | | | | | | | | Fiber Length (m) |
| 0 | | | | | | | | | | | | | | | 0.5 m |
| 1 | | | | | | | | | | | | | | | 1 m |
| 2 | | | | | | | | | | | | | | | 2 m |
| 3 | | | | | | | | | | | | | | | 3 m |
| ?? | | | | | | | | | | | | | | | Specify length (m) |
| | | | | | | | | | | | | | | | Package Type |
| A | | | | | | | | | | | | | | | 4x4x40 mm |
| B | | | | | | | | | | | | | | | 4x7x50 mm |
| C | | | | | | | | | | | | | | | 4x12x60 mm |
| D | | | | | | | | | | | | | | | 4x7x60 mm |
| E | | | | | | | | | | | | | | | 6x20x80 mm |
| F | | | | | | | | | | | | | | | 100x80x10 mm |
| G | | | | | | | | | | | | | | | 120x80x18 mm |
| H | | | | | | | | | | | | | | | 140x115x18 mm |
| I | | | | | | | | | | | | | | | 19" 1U rack |
| J | | | | | | | | | | | | | | | LGX box |
| Příklad | | | | | | | | | | | | | | | |
| DS | SP | - | 0104 | - | 1 | / | 1 | - | 1 | 2 | - | 2 | - | F | INTELDAT PLC splitter, 1x4, loose tube, 900 µm input and outputs, SC/PC input connector, SC/APC output connectors, 2 m outlet lengths, 100x80x10 mm package |