

Multiple 1xN Ultra Broadband Splitter Series

Product description

Our **multiple 1xN planar waveguide splitters** are first choice as uniform broadband power splitters / combiners in a large variety of telecom and sensor applications. Based on ion exchange in glass they optimally balance performance versus cost. Sophisticated design and manufacturing methods give these splitters extraordinary quality and reliability and make them especially suitable for use in harsh environments. Standard products are several splitters 1x2, 1x4, 1x6, 1x8 and 1x16 integrated on a single chip. Such products help our customer to miniaturize their assemblies or modules and to reduce components cost. A large variety of splitter combinations on a single chip is possible.

Highlights

- Lowest insertion loss
 - -> flexibility in your network design
- Highest Uniformity
 - -> less restrictions during installation
- Lowest DDI
 - -> upgradability to highest data rates (100 Gbps)
- Excellent long term stability (since 1993 in the field)
 - -> reduced maintenance costs
- Flexible fiber pigtail assembly
 - -> specific customer requirements



| Optical specifications*) | 8-fold | 4-fold | 4-fold | 4-fold | 2-fold | 2-fold | 2-fold | | | | | | | |
|--------------------------------------|--|--------|---------|---------------------|----------|----------|----------|--|--|--|--|--|--|--|
| | 1x2 | 1x4 | 1x6***) | 1x8 ^{***)} | 1x10***) | 1x16***) | 1x32***) | | | | | | | |
| Insertion loss IL (max.) [dB] | 3,9 | 7,4 | 9,2 | 10,8 | 12,0 | 14,1 | 17,3 | | | | | | | |
| Uniformity (max.) [dB] | 0,5 | 0,9 | 0,9 | 1,0 | 1,2 | 1,3 | 1,6 | | | | | | | |
| Return loss RL [dB] | ≥ 55 | | | | | | | | | | | | | |
| Directivity [dB] | ≥ 55 | | | | | | | | | | | | | |
| Polarisation dependent loss PDL [dB] | ≤ 0,15 | | | | | | | | | | | | | |
| Wavelength range [nm] | 1260 - 1360 and 1480 - 1650 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Mechanical and environmental | | | | | | | | | | | | | | |
| specifications | | | | | | | | | | | | | | |
| Fiber type**) | single-mode fiber ITU G.652.D | | | | | | | | | | | | | |
| Fiber pigtail length [m]**) | ≥1 | | | | | | | | | | | | | |
| Housing dimensions [mm]**) | min. 4 x 4 x 40 (depending on splitter type) | | | | | | | | | | | | | |
| Operating temperature [°C] | -40 to +85 | | | | | | | | | | | | | |
| Storage temperature [°C] | -40 to +85 | | | | | | | | | | | | | |

- *) Note: Valid over full operating wavelengths and temperature ranges for all states of polarization
- **) Other fiber / cable types with and without connectors and modified packages on request
- ***) Only on request

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|---------------------------------------|-----|---|---|--|---|--|--|---|---|---|--|---|
| Order code | | ٧ | х | | | | | | | | | |
| | | | | | | | | | | | | |
| Number of splitters N | Cod | | | | | | | | | | | |
| 2 | 2 | | | | | | | | | | | |
| 3 | 3 | | | | | | | | | | | |
| 4 | 4 | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Number of output | | | | | | | | | | | | |
| | >1 | | | | | | | | | | | |
| Input Fiber | | | | | | | | | | | | |
| Input fiber type | | | | | | | | | | | | |
| 250 µm bare fiber | 10 | | | | | | | | | | | |
| 900 µm tbf fiber (tight buffered) | 20 | | | | | | | | | | | |
| 900 µm fiber with tubing (loose tube) | 30 | | | | | | | | | | | |
| N-fold fiber ribbon | 40 | | | | | | | - | | | | |
| Output fibers | | | | | | | | | | | | |
| Code see input fibers | | | | | | | | | | İ | | |
| Input connectors | | | | | | | | | _ | İ | | |
| Without connector | NC | | | | | | | | | | | |
| FC | 10 | | | | | | | | | | | |
| SC | 20 | | | | | | | | | | | |
| ST | 30 | | | | | | | | | | | |
| LC | 40 | | | | | | | | | | | |
| E2000 | 50 | | | | | | | | | | | |
| MU | 60 | | | | | | | | | | | |
| DIN | 70 | | | | | | | | | | | |
| SMA | 80 | | | | | | | | | | | |
| MPO N fibers (nn = 04, 08 oder 12) | 1nn | | | | | | | | | | | |
| Endface polishing PC | +P | | | | | | | | | | | |
| Endface polishing APC | +A | | | | | | | | | | | |
| Output connectors | | | | | | | | | | _ | | |
| Code see input connector | | | | | | | | | | | | |
| Options | | | | | | | | | | | | |
| e.g. grade | | | | | | | | | | | | |
| Standard | ST | | | | | | | | | | | |
| High Quality | HQ | | | | | | | | | | | |
| Customer specification | CU | | | | | | | | | | | |

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Order code / order options

Please select the order code out of the table given on the previous page.

For special customized modifications please contact us. We offer the standard splitters for telecommunication wavelengths as well as splitters for other wavelength ranges and with further optical functionalities.

Additionally customized packaging like cassettes or shelves for 19" racks can be offered.

Example: V4x610NCNCST is the order code for a multimode splitter with 4 1x6 with 250 μ m input and output fibers without connectors.

Modul options

We offer a wide range of splitter assemblies in modules and racks. Customized assemblies are available on request.



Example for a module assembly: Splitter 3-fold 1x4 in a vertical plug-in module 3 HU with connectorized output fibers and input fibers mounted into a splicing cassette