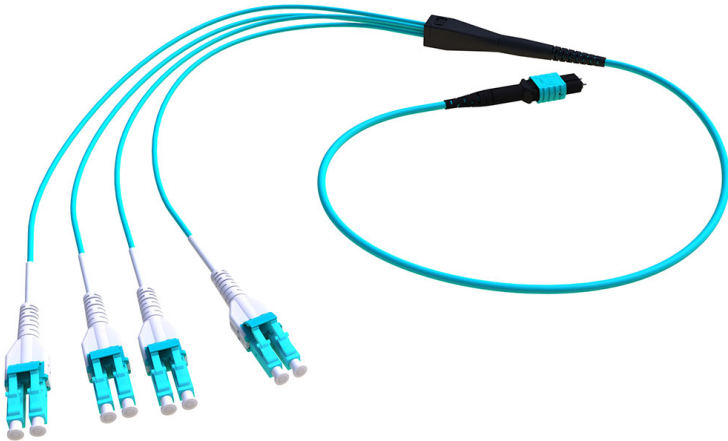


Product updated on September 19, 2018

40G QSFP+ (MPO) to 4x10G SFP+ (8xLC) Assembly



40G parallel optics transceivers (40GBASE-SR4) can support 4x10G modes- this feature allow new parallel optics active equipment being compatible with existing 10G transceivers. MPO QSFP+ to SFP+ Fan-out Assemblies provide connections between single QSFP+ (40G transceiver with MPO interface) and 4 x SFP+ (10G transceivers with LC(DX) Interface). Parallel optics 40GBASE-SR4 uses 8 out of 12 MPO interface fibers transmitting 4 x Duplex (DX) channels (4 x Transmit and 4 x Receive). QSFP+ to SFP+ Fanout is 8 x Fibers MPO to LC(DX) Ruggedized Fan-out assembly. Assembly utilizes new miniature version of breakout module saving fiber management space and providing secure transition between cable and tails.

- New miniature Breakout Module - saving space within patching management area the same time providing robust and safe transition between cable and tails
- Female MPO connectors for direct connection into QSFP+ transceiver
- 4 x 2 mm Tails Uniboot DX version available improving rack patching management
- OM3, OM4, OS1/2, fiber versions
- 3 mm OD Patch/ 4.5 mm OD Trunk MicroCable Versions
- LSZH, OFNP, OFNR cable jacket types selection
- Standard jacket colors: OM3 and OM4 Aqua, G.657A1 Yellow
- Factory terminated and tested
- Optimized performance - Low loss Premium MPO and discrete LC Premium connectors and OM4 fiber assures low insertion losses and power penalties in tight power budget high speed network environment
- Rapid deployment Factory terminated modular system saves installation and reconfiguration time during moves, adds and changes
- Reliability 100% tested - combination of high quality components and manufacturing quality control guarantees product to the highest standards

- Data Center Infrastructure
- Parallel Optics
- Storage Area Networks (SAN)
- 40GBASE-SR4 to 4x10GBASE-SR links

SPECIFICATIONS

| | |
|--------------------------|--|
| Fiber | OM3, OM4, OS1/OS2 G.657A1 |
| Cable | MicroCable- 8 cores MAX OD: Max OD 8 cores Trunk Double Jacket 4.5 ± 0.3 mmMax OD 8 cores Patch Single Jacket 2.95 ± 0.1 mm Jacket Material: LSZH, OFNP, OFNR Jacket Color: Aqua (OM3, OM4), Erica Violet (OM4), Yellow (OS1/OS2, G.657A1) |
| Connectors | MPO 12 Fiber Ferrule Body Sleeve Color: MM (Beige), MM Premium (Aqua, EricaViolet for EV Cable), SM (Green), SM Premium(Yellow), Boot Color: BlackLC(DX), LC(DX) Uniboot Housing Color: Beige (MM Standard), AQUA(MM Low Loss Premium), Blue (SM), Green (SM/APC) |
| Storage Temperature | -20 ~ +60°C |
| Installation Temperature | -5 ~ +50°C |
| Operation Temperature | -20 ~ +60°C |

Connector Performance

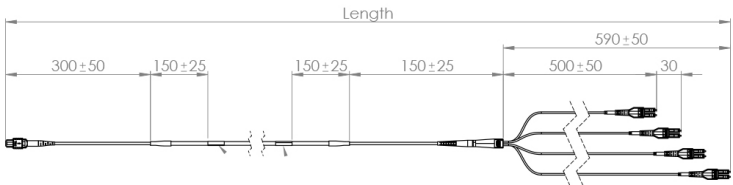
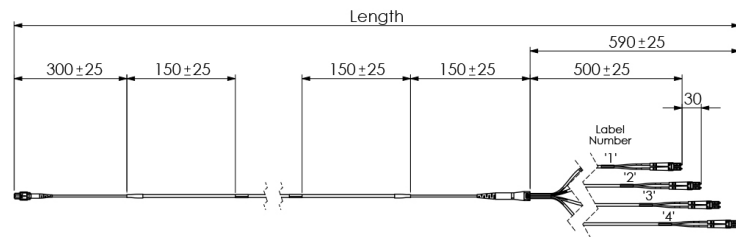
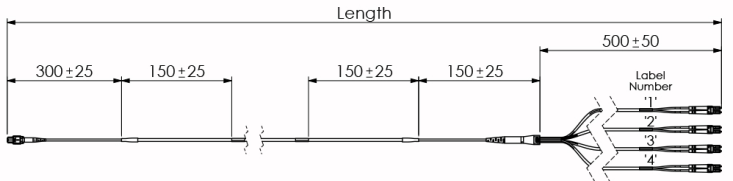
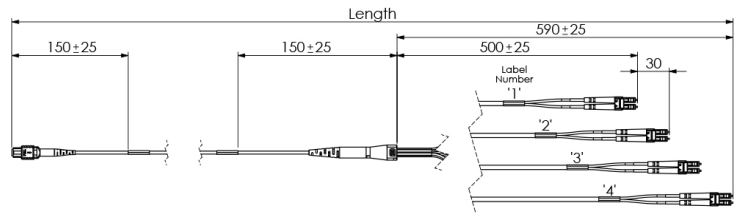
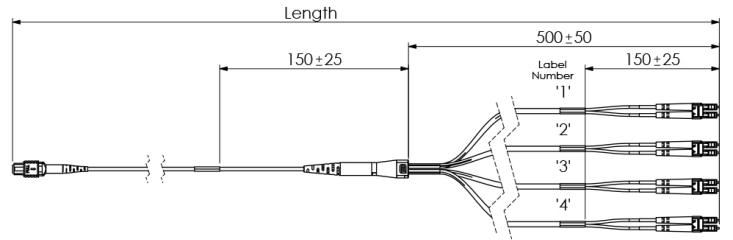
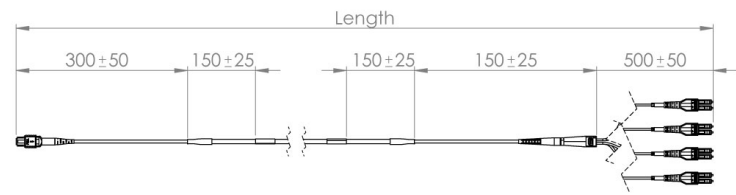
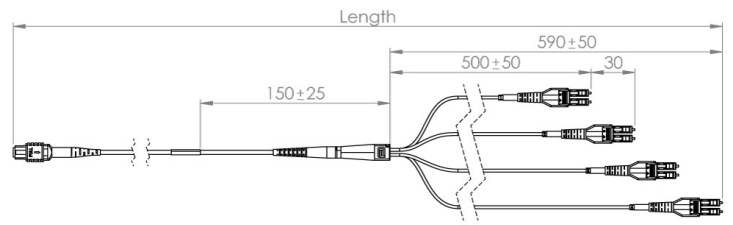
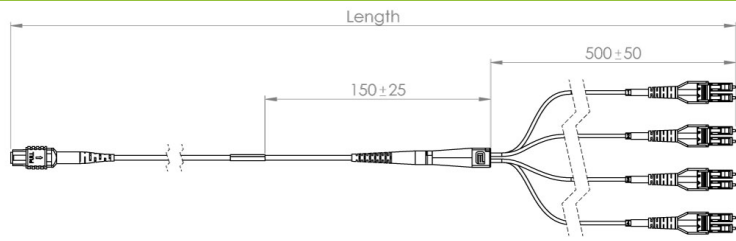
| CONNECTOR MATING | IL AVERAGE | IL MAX | RETURN LOSS |
|------------------------------|------------|-----------|-------------|
| MPO Premium (MM) | 0.10 dB | 0.35 dB | N/A |
| MPO (MM) | 0.20 dB | 0.60 dB | N/A |
| MPO Premium (MM) | 0.10 dB | 0.35 dB | N/A |
| LC, SC (MM) | 0.15 dB** | 0.30 dB** | N/A |
| LC, SC Premium (MM) | 0.08 dB** | 0.15 dB** | N/A |
| MPO Premium (SM) | 0.10 dB | 0.35 dB | >60 dB |
| MPO (SM) | 0.25 dB | 0.75 dB | >60 dB |
| LC, SC (SM) | 0.18 dB** | 0.30 dB** | >55/65 dB* |
| LC, SC Low Loss Premium (SM) | 0.12 dB** | 0.15 dB** | >55/65 dB* |

* UPC/APC

** Tested as per IEC 61300-3-4

Cable Performance

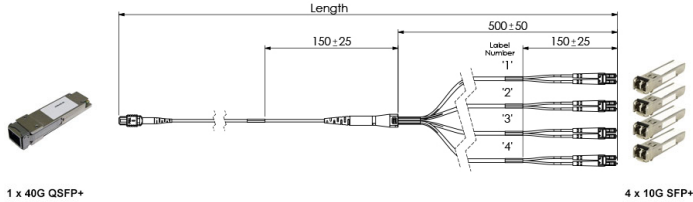
| CABLED FIBRE TYPE (ISO/IEC 11801) | OS1/OS2 | OM3 | OM4 |
|---|---|---|---|
| Attenuation Coefficient [dB/km] | ≤ 0.38 Max (1300 nm) ≤ 0.25 Max (1300 nm) ≤ 0.34 Typ (1550 nm) ≤ 0.19 typ (1550 nm) | ≤ 3.5 Max (850 nm) ≤ 1.5 Max (1300 nm) ≤ 2.7 Typ (850 nm) ≤ 0.9 typ (1300 nm) | ≤ 3.5 Max (850 nm) ≤ 1.5 Max (1300 nm) ≤ 2.7 Typ (850 nm) ≤ 0.9 typ (1300 nm) |
| Minimum Bandwidth: Overfilled Launch [Mhz-km] | N/A | ≥ 1500 (850 nm) ≥ 500 (1300 nm) | ≥ 3500 (850 nm) ≥ 500 (1300 nm) |
| Minimum Bandwidth: Laser Effective Modal Bandwidth [Mhz-km] | N/A | ≥ 2000 (850 nm) | ≥ 4700 (850 nm) |



Typical Application

What is a QSFP+ to SFP+ Fanout Assembly?

A QSFP+ to SFP+ cable assembly is an eight fibre MTP to LC Ruggedised Fanout connecting a single 40G QSFP+ with four x 10G SFP+ Transceivers



ADDITIONAL INFORMATION

- TIA/EIA-568-C.3 and ISO/IEC 11801
- IEC 61754-7 & EIA/TIA-604-5
- NFPA 262 or IEC 60332
- IEC 61754-20 & IEC 61754-14
- RoHS, REACH and SvHC materials compliant
- IEC 60793

ORDERING INFORMATION

| Connector End A | | Fiber Count | Connector End B | | Fiber Type | | Cable Construction | | Tail Type | | Cable Length | | Length Unit | | Cable Jacket Type | | Discrete Termination Grade | |
|-----------------|-----------------|-------------|-----------------|------------|------------|------------|--------------------|------------------|-----------|----------------|--------------|---|-------------|-------|------------------------|----------|----------------------------|------------------|
| MF | MPO (F) | 8 8F core | LC | LC | OM3 | OM3 50/125 | QSP | 3mm MicroCable | A | QSFP Fanout | 1 | 1 | leave blank | metre | leave blank | LSZH | leave blank | Standard |
| MPF | MPO Premium (F) | | LCU | LC Uniboot | OM4 | OM4 50/125 | QST | 4.5mm MicroCable | B | QSFP Staggered | 2 | 2 | FT | Feet | RI | Riser | /P | Low Loss Premium |
| MM | MPO (M) | | 7A1 | G.657A1 | | | | | | | 3 | 3 | | | PL | Plenum | | |
| MPM | MPO Premium (M) | | | | | | | | | | 5 | 5 | | | RIUL | Riser UL | | |
| | | | | | | | | | | 10 | 10 | | | PLUL | Plenum UL | | | |
| | | | | | | | | | | XX | Specify | | | E**** | LSZH CPR Euroclass Eca | | | |

*LCR Connector, please contact account manager for suitability.
 **MTP US Conec MPO Connectors Available on Request- Add suffix "-US" to the end of PN
 **** Standard Stock Profile Double Jacket 4.5mm OD Only

Example Part Number

| | | | | | | | |
|----|---|-----|-----|-----|---|---|----|
| MF | 8 | LCU | OM3 | QST | A | 1 | /P |
|----|---|-----|-----|-----|---|---|----|

MF8LCUOM3QSTA1/P - Assembly 8 Core MPO (F)-LC Uniboot OM3 50/125 4.5mm OD MicroCable QSFP Fanout LSZH Aqua 1mtr - Prem



FURTHER INFORMATION

- For additional information please contact your sales representative
- To view the product 360 visit the product page (Scan the QR code or visit the link below)
- Downloaded from <https://www.aflhyperscale.com/product/qsfp-mpo-sfp-lc-assembly>
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