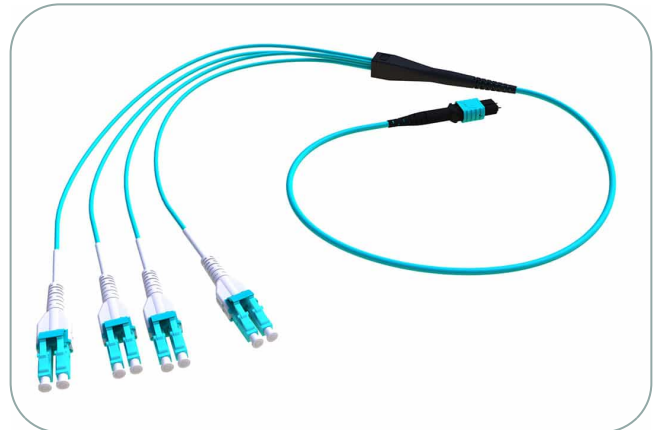# MPO to LC Assembly BASE-8

40G parallel optics transceivers (40GBASE-SR4) supports 4x10G modes, making new parallel optics active equipment compatible with existing 10G transceivers. MPO QSFP+ to SFP+ fanout 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 fanout assembly. The assembly utilizes a miniature version of a breakout module saving fiber management space and providing a secure transition between cable and tails.

Features

- New miniature breakout module saves space within the patching management area whilst providing a 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) improve rack patching management
- OM3, OM4, G.657A1, and G.657A2 fiber versions
- 3 mm OD Patch / 4.5 mm OD Trunk MicroCable versions
- LSZH, OFNP, and OFNR cable jacket types
- Standard jacket colors: OM3 and OM4 Aqua, G.657A1, or G.657A2 Yellow
- Factory terminated and tested
- Optimized performance - premium MPO, discrete LC premium connectors, and OM4 fiber assure low insertion losses and power penalties in tight power budget, high-speed network environments
- Rapid deployment - factory terminated modular system saves installation and reconfiguration time during moves, adds, and changes
- 100% tested - a combination of high-quality components and manufacturing quality control guarantees product performs to the highest standards

Applications

- Data center
- Parallel optics
- Storage Area Networks (SAN)
- 40GBASE-SR4 to 4x10GBASE-SR links

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Specifications

ELEMENT	CHARACTERISTICS
Fiber	OM3, OM4, OS1/OS2 G.657A1, G.657A2
Cable	MicroCable- 12 cores MAX OD: Max OD 12 cores Trunk Double Jacket 4.5 ± 0.3 mm / Max OD 12 cores Patch Single Jacket 3.0 ± 0.3 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 Premium (Aqua, EricaViolet for EV Cable), SM Premium(Yellow) Boot Color: BlackLC(DX), LC(DX) Uniboot Housing Color: AQUA(MM), 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 Premium (MM)	0.10 dB	0.35 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
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)

Ordering Information

Code	Fiber Type		Cable Type		Jacket Material		Color		Code	End A		End B		Code		Unit		Length	
M	3	OM3	DQ8	Microcable 12F Single Jacket 3mm	L	LSZH	9	YELLOW	P	U	MPO F	A	LC	-K010-	QSFP Staggered Simplex	M	Meters	1	1

F AFL

4	OM4	DS8	Microcable 12F Double Jacket 4.5mm	E	CPR Eca	C	AQUA	V	MPOM	C	LC Uniboot	-K013-	QSFP Staggered Duplex	F	Feet	2	2
7	G.657A1			C	CPR Cca*	D	ERIKA VIOLET*					-K014-	QSFP Fanout Duplex			3	3
8	G.657A2			B	CPR B2ca*							-K017	QSFP Staggered Uniboot			5	5
				R	OFNR							-K018	QSFP Fanout Uniboot			10	10
				Q	OFNR UL Listed*											XX	Specify
				P	OFNP												
				A	OFNP UL Listed*												

* Check Cable Availability ** USConec MTP connectors available - contact Customer Service for information

Legacy 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)					7A2	G.657A2					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