

OCM8 splitter modules

Specification guide for single mode devices



OCM8 splitter modules

These passive optical splitters can positively impact your network rollout by extending your network, reducing the number of fibers necessary and saving on time spent for deployment.

Plus, they can easily be added to your network on an asneeded basis, which allows you to delay CapEx expenditures until necessary. OCM8 are designed for use both in indoor and outside plant environments. So, they're equally up to the task of splitting and combining light signals in the field to provide new service at Multi-Dwelling Units (MDUs) as they are for use in the central office to monitor network activities.

CommScope's OCM8 splitter portfolio is based on planar lightwave circuit (PLC) technology used to split and combine light. The OCM8 housings support a variety of split ratios: 1:N and 2:N configurations where N=2 to 64. Standard configuration use LC/APC and can be offered with SC/APC connectors both according to IEC 61755-1 grade B/1. In-line housing style is available upon request.

CommScope's portfolio of OCM8 splitters meets OSP operating temperature and environment requirements of -40°C to +70°C. The OCM8 modules are designed for use in environmental category C (controlled) and category OP (outdoor protected) as characterized by IEC 61753-1 Ed2. PLC splitters are designed and tested to IEC 61753-031-3 Ed2.

Advantages

- Low attenuation (insertion loss)
- Consistent performance
- Small footprint
- Excellent uniformity
- Low polarization dependent loss (PDL)

Applications

- Passive optical networks (PONs)— FTTH and FTTx
- Telecommunications networks
- CATV / MSOs

The incorporation of fiber-optic splitters reduces the number of fibers in the network—decreasing both the footprint and investment cost of network rollouts.

Integrated solutions using a small robust package

CommScope's OCM8 splitters are an example of a critical fiber network component that today can easily be deployed by any technician. This next generation of optical component modules comes packaged in a tough, protective module to safeguard its performance and integrity, and features factoryconnectorized pigtails for plug-and-play simplicity and failurefree installation.

These premium passive optical devices split and combine light in fiber networks. They come in three sizes (small, medium and large) to accommodate any symmetrical split ratio from 1:2 up to 1:64. These modules also feature our highperformance 1.8 m LSZH fiber optic cables that are factoryassembled with LC/APC connectors as standard. Designed for high-density environments, OCM8 modules are our smallest integrated splitter modules. They're stackable and can be mounted into CommScope's OCSH-K-OCM6/8 shelf. Standard 19" mounting allows installation into Optical Distribution frames or Cabinets. They're also available in butt and in-line versions for simple integration into any central office, fiber distribution hub or BUDI box application. In addition, they're backwards compatible with most older generation modules.

Especially designed for high-density environments





OCSH-K-OCM6/8

Shelf for central office and cabinet applications



BUDI

Building distribution box (BUDI) for multi-dwelling units

OCM8 splitter optical performance

Split ratio	Bandpass (nm)	Insertion loss max (dB), B grade	Uniformity max (dB)	RL min (dB)	PDL max (dB)	Directivity min (dB)
1x2 (50/50)	1260-1650	4.2	0.85	55	0.2	55
1x4	1260-1650	7.6	0.95	55	0.2	55
1x8	1260-1650	10.9	1.25	55	0.2	55
1x16	1260-1650	14.2	1.55	55	0.3	55
1x32	1260-1650	17.5	1.75	55	0.3	55
1x64	1260-1650	21.0	2.25	55	0.4	55
2x2 (50/50)	1260-1650	4.7	1.45	55	0.3	55
2x4	1260-1650	8.0	1.65	55	0.3	55
2x8	1260-1650	11.4	1.85	55	0.3	55
2x16	1260-1650	14.8	2.25	55	0.4	55
2x32	1260-1650	18.2	2.65	55	0.4	55





OCM8 Splitter module

Butt style

In-line OCM8 splitter module

Optional for BUDI boxes

Housing types and dimensions

Colit cotio		Housing type OCM8: butt style			
Split ratio	Length (mm)	Width (mm)	Height (mm)	Housing type	
1x2 (also 2x2)	100	45	5		
1x4 (also 2x4)	100	45	5	Small	
1x8 (also 2x8)	100	45	5		
1x16 (also 2x16)	100	45	10	Madium	
1x32 (also 2x32)	100	45	10	Medium	
1x64 (also 2x64)	140	45	20	Large	

OCM8 splitters

OCM8 splitter modules LC/APC — 1:x split ratio

MID	Description
1:2 split ratio	
760241980	OCM8 module containing 1x 1:2 PLC splitter, LC/APC, 2m pigtail length input/output, butt version
760242092	OCM8 module containing 1x 1:2 PLC splitter, LC/APC, 4m pigtail length input/output, butt version
1:4 split ratio	
760241649	OCM8 module containing 1x 1:4 PLC splitter, LC/APC, 2m pigtail length input/output, butt version
760242096	OCM8 module containing 1x 1:4 PLC splitter, LC/APC, 4m pigtail length input/output, butt version
1:8 split ratio	
760241981	OCM8 module containing 1x 1:8 PLC splitter, LC/APC, 2m pigtail length input/output, butt version
760241576	OCM8 module containing 1x 1:8 PLC splitter, LC/APC, 4m pigtail length input/output, butt version
1:16 split ratio	
760242012	OCM8 module containing 1x 1:16 PLC splitter, LC/APC, 61cm pigtail length input/output, butt version
760253085	OCM8 module containing 1x 1:16 PLC splitter, LC/APC, 72cm pigtail length input/output, butt version
760241982	OCM8 module containing 1x 1:16 PLC splitter, LC/APC, 2m pigtail length input/output, butt version
760242098	OCM8 module containing 1x 1:16 PLC splitter, LC/APC, 4m pigtail length input/output, butt version
1:32 split ratio	
760253086	OCM8 module containing 1x 1:32 PLC splitter, LC/APC, 61cm pigtail length input/output, butt version
760242011	OCM8 module containing 1x 1:32 PLC splitter, LC/APC, 72cm pigtail length input/output, butt version
760241983	OCM8 module containing 1x 1:32 PLC splitter, LC/APC, 2m pigtail length input/output, butt version
760242095	OCM8 module containing 1x 1:32 PLC splitter, LC/APC, 4m pigtail length input/output, butt version
1:64 split ratio	
760241984	OCM8 module containing 1x 1:64 PLC splitter, LC/APC, 2m pigtail length input/output, butt version
760242093	OCM8 module containing 1x 1:64 PLC splitter, LC/APC, 4m pigtail length input/output, butt version

OCM8 splitter modules LC/APC — 2:x split ratio (continues on next page)

MID	Description
2:2 split ratio	
760242985	OCM8 module containing 1x 2:2 PLC splitter, LC/APC, 2m pigtail length input/output, butt version
760253087	OCM8 module containing 1x 2:2 PLC splitter, LC/APC, 4m pigtail length input/output, butt version
2:4 split ratio	
760242986	OCM8 module containing 1x 2:4 PLC splitter, LC/APC, 2m pigtail length input/output, butt version
760253088	OCM8 module containing 1x 2:4 PLC splitter, LC/APC, 4m pigtail length input/output, butt version
2:8 split ratio	
760253089	OCM8 module containing 1x 2:8 PLC splitter, LC/APC, 61cm pigtail length input/output, butt version
760244205	OCM8 module containing 1x 2:8 PLC splitter, LC/APC, 72cm pigtail length input/output, butt version
760242984	OCM8 module containing 1x 2:8 PLC splitter, LC/APC, 2m pigtail length input/output, butt version
760253090	OCM8 module containing 1x 2:8 PLC splitter, LC/APC, 4m pigtail length input/output, butt version

OCM8 splitters

OCM8 splitter modules LC/APC — 2:x split ratio (continued from previous page)

MID	Description			
2:16 split ratio				
760253091	OCM8 module containing 1x 2:16 PLC splitter, LC/APC, 61cm pigtail length input/output, butt version			
760243011	OCM8 module containing 1x 2:16 PLC splitter, LC/APC, 72cm pigtail length input/output, butt version			
760242983	OCM8 module containing 1x 2:16 PLC splitter, LC/APC, 2m pigtail length input/output, butt version			
760253092	OCM8 module containing 1x 2:16 PLC splitter, LC/APC, 4m pigtail length input/output, butt version			
2:32 split ratio				
760241435	OCM8 module containing 1x 2:32 PLC splitter, LC/APC, 61cm pigtail length input/output, butt version			
760243012	OCM8 module containing 1x 2:32 PLC splitter, LC/APC, 72cm pigtail length input/output, butt version			
760242987	OCM8 module containing 1x 2:32 PLC splitter, LC/APC, 2m pigtail length input/output, butt version			
760253093	OCM8 module containing 1x 2:32 PLC splitter, LC/APC, 4m pigtail length input/output, butt version			
2:64 split ratio				
760253094	OCM8 module containing 1x 2:64 PLC splitter, LC/APC, 2m pigtail length input/output, butt version			
760253095	OCM8 module containing 1x 2:64 PLC splitter, LC/APC, 4m pigtail length input/output, butt version			

OCM8 chassis solution – 1HU

1HU module storage shelf OCSH-K-OCM6/8

- Typically used in 19" active racks, or data racks
- Can be front mounted
- Front access to the modules
- Pigtails can exit the shelf left or right—maximum capacity is 340x1.8 mm patch cords
- Integrated fiber cord management
- Simple plug and play of module
- Dimensions: height 44 mm x width 481 mm x depth 281 mm

Description	Color	Part number
OCSH-K-OCM6/8	Grey	EH3193-000



1HU chassis capacity overview

Splitter housing type	Maximum number of modules per shelf	Maximal configuration	Maximum cable count (1.8 mm diameter)	OCM8 adaptation bracket required for maximum capacity
OCM8 S size	30	2x8	300	6
OCM8 M size	15	2x16*	270	6
OCM8 M size	10	2x32	340	6
OCM8 L size	5	2x64	330	3
OCM6	10	2x32	340	Not

*Not a maximal splitter configuration but allows to install maximal number of OCM8 M splitters



OCM8 chassis solution – 4HU

4HU module storage shelf OCSH-L

- Typically used in 19" active racks, or data racks, cabinets
- Allows the storage of up to 18 modules OCM6 & OCM8 (using adaptation bracket)
- Front access to the modules
- Pigtails can enter the shelf at the left or right when the shelf is turned upside down
- 30 mm bend radius protection
- Compatible with racks and cabinets using the FIST fiber management system
- Dimensions: height 173 mm x width 481 mm x depth 242 mm

Description	Color	Part number
OCSH-L	Grey	CV7336-000
Accessories		Part number





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