

LaserLite Model OTCP-1xN Wideband Dual Window SM Optical Couplers/Splitters (1x2 through 1x32)

Features / Benefits

Ideal for CATV/HFC video and high speed data distribution networks, FTTx, PON, LAN/WAN/long haul telecommunications systems, laboratory testing, back reflection measurements and sensors, EDFA and WDM applications.

Low-cost, space-saving devices for accurate and reliable optical signal splitting.

Wideband dual optical window (1310 and 1550nm \pm 40nm).

High performance, high directivity, and excellent environmental stability.

Low insertion loss, low polarization sensitivity, and low back reflection.

Available in standard splitting ratios from 1x2 to 1x32.

Available in several high density packaging options (standalone, 1RU and 2RU).



The **Olson Technology, Inc. LaserLite Model OTCP-1xN** is a low-cost, high performance family of passive optical splitter/coupler products which provide a protective, enclosed environment for fiber splitting, as well as network testing and real-time monitoring, in CATV, HFC or PON broadband applications. The unit utilizes ultra-reliable Fused Biconic Taper (FBT) technology to enable it to meet or exceed its performance specifications over a wide temperature range and to deliver long-term reliability. Compliant with Telcordia Bellcore 1221 and 1209, OT couplers are subjected to thermal cycling and tested for insertion loss, back reflection and bandpass.

The base **Model OTCP-1xN** (where N = 2, 3, 4, 6 or 8) is a low-profile, rugged, Olson-standard *LaserLite* package. It is configured for standalone desktop, shelf or wall-mounting, or it can also be rack-mounted in the 1RU 19" EIA **Model OTLL-RMKIT-1** as a low-cost option.

For architectures and applications requiring even larger optical splitting ratios, the **Model OTCP-1xN** (where N = 12, 16 or 24) is available in a 1RU 19" rack mount package, while the **Model OTCP-1x32** is available in a 2RU 19" EIA rack mount package.

The **OTCP-1xN** is the perfect companion to the Olson Technology, Inc. **LaserLite Models OTOT-x and OTEA-x** and **LaserPlus Models LP-OT-x and LP-OA-x** optical transmitter and EDFA product families. It is also designed to mate with 1310/1550nm optical transmitters and EDFA's from most leading manufacturers.

System Specifications

Performance Parameters (9/125µm SMF-28)

	Min	Typ	Max	Units
Center Wavelengths		1310		nm
		1550		nm
Bandpass (@1310/1550nm)	-40		+40	nm
Directivity	55			dB
Operating Temp. Range	-40		+85	°C
Storage Temp. Range	-40		+85	°C
Thermal Stability			0.002	dB/°C
Split Ratios (1xN)				
Standalone Unit	2, 3, 4, 6, 8			
1RU Unit	12, 16, 24			
2RU Unit	32			

Physical Characteristics

Dimensions (W x H x D)	Min	Typ	Max	Units
Standalone Module	5.5	1.375	7.625	in.
(LaserLite)	139.7	34.9	193.7	mm
1RU Unit	19	1.77	11.02	in.
	482.6	44.9	279.9	mm
2RU Unit	19	3.5	11.02	in.
	482.6	88.9	279.9	mm

Individual Performance Parameters and Ordering Information

Model Number	Split Ratio	Housing	Max. Loss (dB) incl. Conn. Loss	Max. Uniformity (dB)	Polarization Depen. Loss (dB)
OTCP-1x2-50-zz	1x2 (50/50)	LaserLite	3.5/3.5	0.7	0.10
OTCP-1x2-40-zz	1x2 (40/60)	LaserLite	4.6/2.7	0.7	0.10
OTCP-1x2-30-zz	1x2 (30/70)	LaserLite	5.9/1.9	0.7	0.10
OTCP-1x2-20-zz	1x2 (20/80)	LaserLite	7.9/1.3	0.7	0.10
OTCP-1x2-10-zz	1x2 (10/90)	LaserLite	11.2/0.8	0.7	0.10
OTCP-1x2-05-zz	1x2 (5/95)	LaserLite	14.5/0.4	0.7	0.10
OTCP-1x3-00-zz	1x3 (even)	LaserLite	5.8	0.8	0.15
OTCP-1x4-00-zz	1x4 (even)	LaserLite	7.0	1.4	0.30
OTCP-1x6-00-zz	1x6 (even)	LaserLite	9.0	1.5	0.40
OTCP-1x8-00-zz	1x8 (even)	LaserLite	10.6	2.1	0.45
OTCP-1x12-00-zz	1x12 (even)	1RU	12.5	2.5	0.50
OTCP-1x16-00-zz	1x16 (even)	1RU	14.0	2.8	0.60
OTCP-1x24-00-zz	1x24 (even)	1RU	16.1	3.1	0.70
OTCP-1x32-00-zz	1x32 (even)	2RU	17.6	3.5	0.75

Where zz = SA for SC/APC or FA for FC/APC connectors

Accessories

OTLL-RMKIT-1 1RU 19" EIA Rack Mount Kit for up to three (3) OTCP-X, OTOT-X and/or OTOR-300



Typical 1RU 19" OTCP couplers with 12, 16 & 24 ports