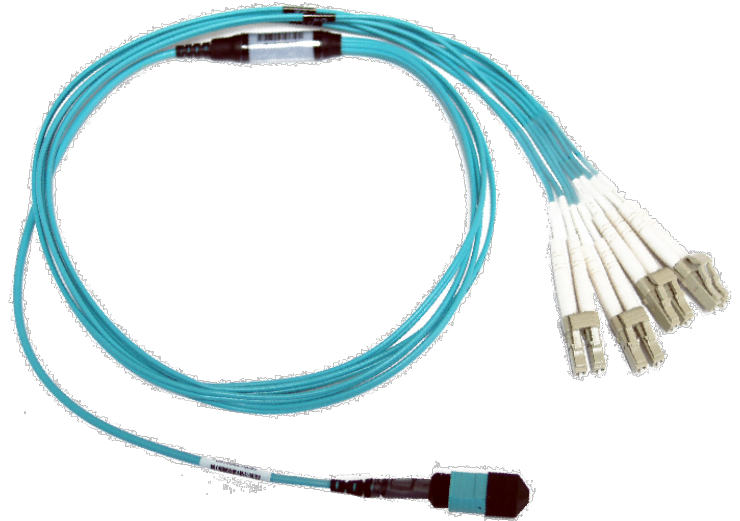


## Overview

Wave2Wave.io's **w-Ignite™ MPO-to-LC Breakout Cable** delivers a reliable, high-performance transition between **12-fiber or 24-fiber MPO trunk cables** and **duplex LC connections**. Designed for **high-density environments** such as data centers and enterprise networks, these breakout cables simplify connectivity between backbone infrastructure and active equipment.

Each assembly is **factory-terminated, precision-polished, and 100% tested** for insertion loss and return loss—ensuring **exceptional optical performance** and **plug-and-play installation**. The result: faster deployments, fewer field terminations, and long-term reliability that exceeds industry standards.

## High-Density Optical Cable



### Features & Benefits

- **Low Insertion Loss / Low Return Loss** for maximum optical performance
- **Factory-terminated and individually tested** for quality assurance
- **Plug-and-play installation**—no field polishing or termination required
- **High-density design**—one MPO replaces up to 24 individual fiber connectors
- **Precision guide pins** ensure consistent alignment and connectivity
- **Push/pull latch mechanism** for quick and secure mating
- **Color-coded housings** for easy single-mode and multimode identification
- **Durable identification labels** for complete traceability
- **Plenum-rated cable jacket** for code-compliant indoor installation

### Applications

- Data centers and hyperscale facilities
- High-density cross-connects and backbone cabling
- Enterprise and telecom network infrastructure
- Equipment rooms and server racks
- Test labs and optical measurement setups
- Premise and inter-building installations

## High-Density Optical Cable

MPO Performance Specifications				
	MM Elite (850 & 1300nm)	MM (850 & 1300nm)	SM Elite (APC) (1310 & 1550nm)	SM (APC) (1310 & 1550nm)
Typical Insertion Loss	0.10	0.20	0.10	0.25
Max	0.35	0.60	0.35	0.70
Max Return Loss (dB)	-20	-20	-60	-55

Performance Specification			
Fiber Type	SM		MM
Polishing	UPC	APC	PC
Insertion Loss	< 0.3dB	< 0.3dB	< 0.2dB
Return Loss	≥ 50dB	≥ 60dB	NA
Durability	> 1000 Matings		> 1000 Matings
Core Diameter	9/15 μm		50/125 μm or 62.5/125 μm
Operating Temperature	-40°C to 80°C		

Product Selection					
Part Number: 51a-CDEFgh-XXM					
a (optional)	C	DE	F	gh (Cable jacket)	XX
M	3 (SMF 9/125)	08	0 (PC)	P (Plenum)	Length
(male guide pins)	4 (OM3 50/125)	12	1 (UPC)	L (LSZH)	(Meters)
	8 (OM4 50/125)	20	2 (APC)		
	9 (OM5 50/125)	24			

### Standards Compliance

- EIA/TIA-455-21A
- IEC-61754-7
- TIS-604-5 (FOCIS 5)
- RoHS

