

# Optical Industrial Assemblies and Adapters

**molex**<sup>®</sup>

**Ideal for harsh outdoor applications, Optical Industrial Assemblies ensure compatibility with other compliant connector systems and deliver easy mating with virtually any active device**

## Features and Benefits

Housing is NEMA 6P and IP67 rated

Provides dust and moisture protection. Can be used in many harsh environments

Plastic and metal housing options for LC plug connectors and panel-mount adapters. Metal body LC connectors have been tested to GR-486: salt and fog exposure for extreme elements

Provides design flexibility to meet a variety of harsh environment demands

Utilizes an industry-standard (ODVA compliant) connector and adapter

Ensures performance and compatibility with other compliant connector systems

Three-axis (x, y and z) internal float incorporated in the LC duplex version

Allows end users to connect virtually any SFP active device

Sealed panel feed-through design versions (ODVA-compliant options available) with panel nut located inside the enclosure

Offers simple installation. Internal panel-nut location provides tamper-proof and environmental protection (Competition's panel nut is outside enclosure, risking seal to be broken via tampering)

Panel-mount adapter option for plug connector to mate directly to a transceiver

Reduces cabling in box. Minimizes link loss

Available for use with singlemode and multimode fiber

Works with most common fiber types

Bayonet-style positive mechanical latch

Enables easy installation and removal in tight quarters

Broad temperature range (-40 to +85°C)

Ideal for outdoor (and indoor) applications

Cable assemblies are 100% optically tested before shipment

Ensures high-performance assemblies out of the bag



Plastic and Metal Housings  
LC Duplex and MPO Connectors,  
Adapters and Cable Assemblies

## Applications

### Telecommunications

Remote Radio Head (RRH) – LTE

Applications

FTTx

Outdoor System Connections

CATV

### Industrial Automation

System Controls

Monitoring

High Electromagnetic Interference  
(EMI) and Radio Frequency

Interference (RFI) Areas

### Military

### Medical

### Other Markets

Rugged Test Equipment

Mobile Broadcasting or Audio-Visual  
Equipment

Food Processing Plants

Security / Disaster Response

Low Spark or No Spark Zones  
(Oil and Gas Mining)



Remote Radio Head



Outdoor Industrial Automation:  
Mining / Quarry

# Optical Industrial Assemblies and Adapters



## Specifications

### REFERENCE INFORMATION

Packaging: Cable Assemblies: Individual Bag or Spool  
Adapters: Individual Bag  
Mates With: Standard LC, SC or MPO Assemblies (respectively)  
Designed In: Inches

### OPTICAL

Insertion Loss:  
SingleMode <0.35dB max. (0.13dB typical)  
Multimode <0.50dB max. (0.10dB typical)  
Return Loss:  
Singlemode 45 to 55dB  
Wavelength:  
Singlemode 1310 or 1550nm  
Multimode 850 or 1300nm

### PHYSICAL

Housing: Polymer or Metal  
Ferrule: Zirconia Ceramic  
Cable Type: Duplex or Simplex; Indoor or Outdoor  
Mode: Singlemode or Multimode

## Ordering Information

Series No.	Connector Type	Connector System Component	Material	Cable Type	Dust Cap	Mounting Style	Fiber Count	Fiber Type
<a href="#">106059</a>	Industrial LC MPO (MTP*)	Connector	Metal or Plastic	Indoor/Outdoor	Black	Bayonet	2	Multimode or Singlemode
<a href="#">106059</a>	Industrial LC	Adapter	Metal	Indoor/Outdoor	White or Black	Jam Nut Mount Flange Mount	2	Multimode or Singlemode
	Industrial MPO (MTP*)					Jam Nut Mount	12	
<a href="#">106501</a>	Industrial LC	Adapter	Metal	N/A	White or Black	Direct mate to active device	2	Multimode or Singlemode

### CABLE ASSEMBLIES

Custom	Industrial Connector Housing Type	Distal end connector	Fiber Type	Length (m)
<a href="#">Contact Molex</a>	LC - Metal	Standard LC Duplex	2f - 50/125um 2f - 9/125um	1.0, 3.0, 5.0, 10.0, 15.0, 25.0, 50.0, 100.0, 300.0, 500.0
<a href="#">Contact Molex</a>	MPO (MTP*) Male – Plastic Industrial MPO (MTP*)	MPO (MTP*) Female - Plastic MPO (MTP*) Male – Plastic	12f - 50/125um 12f – 9/125um	1.00 to 500.0

NOTE: Additional fiber types, Lengths and Configurations Available \*MTP is a registered trademark of US Conec

[www.molex.com/link/opticalindustrial.html](http://www.molex.com/link/opticalindustrial.html)