

SPECIFICATION

MINI IP MPO WATERPROOF ADAPTER-12C&24C



Description

Mini IP MPO Waterproof adapter provides alignment for a male and female Mini IP MPO connector. It works for 12 fibers & 24 fiber, widely used in FTTH Project, MST box.

MPO/MTP fiber optical adapter comply with industry standard TIA - 568C. 3-2008 (standard of fiber optical system) and YD/T1272.5-2009 (fiber optical connector part v: MPO style).

OMC Adapters design, material and manufacturing process assure long life and high repeatability of optical performances even for different brand connectors mating.

Products Materials

| Parts name | Material | Parts name | Material |
|-----------------------|----------|--------------------|------------|
| Adapter body | PC+ABS | Adapter body screw | PBT&PC+ABS |
| Waterproof Dust Cover | PC | Sling | Silica gel |
| Dust Cover | TPV | Waterproof gasket | Silica gel |

Optical Specifications

| Connector Type | MPO | Keyway | Opposed (Up-Down) |
|-------------------|---------------------|---------------------|---------------------|
| Adapter Port | Single | Protection level | IP67 or IP68 |
| Insertion Loss | $\leq 0.3\text{dB}$ | Durability | $\leq 0.1\text{dB}$ |
| Flammability Rate | UL94-V0 | Working Temperature | -25~70°C |



Features:

Complies with IEC 61754-4 standard
 Available in Flanged and Flangeless options
 Push-pull locking mechanism for easy installation
 Precision connection with sleeve
 SM and MM connector can be used interchangeably
 Low insertion loss, High Return loss
 Good interchangeability and reliability
 Meet IEC and ROHS standards
 High precision of mechanical dimensions Accuracy

Environment and Mechanical Testing

| Properties | Test condition | Conformance | Test result |
|-------------------------------------|--|----------------------|---|
| Vibration | Frequency: 10-55Hz, amplitude: 1.5mm, vibrate for 2 hours in the X, Y, and Z directions, and test the insertion loss after each spindle vibration ends | IEC61300-2-1,GR 326 | Changes in IL before and after the experiment $\leq 0.2\text{dB}$ |
| Mating Durability | 500 Mating, clean every 10 mating. | IEC61300-2-2,GR 326 | Changes in IL before and after the experiment $\leq 0.2\text{dB}$ |
| Impact | 1.5m, 8 drops | IEC61300-2-6,GR 326 | Changes in IL before and after the experiment $\leq 0.2\text{dB}$ |
| Strength of Coupling Mechanism | 40N, 10Min, L=22-28cm | IEC61300-2-12,GR 326 | Changes in IL before and after the experiment $\leq 0.2\text{dB}$ |
| Temperature Cycling | 40°C to +75°C, 40 cycles, 168 hours | IEC61300-2-22,GR 326 | Changes in IL before and after the experiment $\leq 0.2\text{dB}$ |
| Temperature humidity cycling | Temperature: -10 °C ~ +65 °C Humidity: 90% -100% RH Time: 168 hours | IEC61300-2-21,GR 326 | Changes in IL before and after the experiment $\leq 0.2\text{dB}$ |
| Bending test | Condition: Load 0.9 kilograms, repeat 100 cycles at 0 °C, 90 °C, 0 °C, -90 °C, and 0 °C | GR 326 | \leq Changes in IL before and after the experiment $\leq 0.2\text{dB}$ |
| Insertion and extraction force test | Insert the Connector horizontally at a speed of 10mm/S and test the insertion force | IEC61754 | Changes in IL before and after the experiment $\leq 0.2\text{dB}$ |
| Waterproof | The water surface should be at least 0.15 meters above the top of the shell, and the bottom of the shell should be at least 1 meter above the water surface for 8 hours. | IP67 | There are no water stains inside before and after the experiment |