

# Hybrid Rotary Joint



**LPF0-1F3001**

## Hybrid Rotary Joint

### Description

Hybrid Rotary Joint would be designed for the most demanding requirements and tested for those rugged environment and superb optical performance. All of materials and components have been selected to ensure the highest reliability in extreme conditions, including shock & vibration, working temperature, working humidity and dust. The design of these series has proven performance records in both industrial and military applications. Also the package can be configured to fit the customer's specific need.

Hybrid Rotary Joint are available in single and multi-channel options. The most cost and size efficient options are the single and dual channel design. If more than two fibers are present in a system, multiplexing solutions are available to combine multiple channels onto one or two fiber to allow the use of a one or two channels.

### Main Application

- ◆ Vehicle Turrets
- ◆ Medical Systems
- ◆ Radar Antennas
- ◆ Robotics Vehicles
- ◆ Security Systems
- ◆ Material Handling Systems
- ◆ Sensor Platforms
- ◆ Remotely Operated Vehicles
- ◆ Video Surveillance Systems
- ◆ Fiber Optic Cable Reels
- ◆ Marine Population Systems
- ◆ Wind Energy Turbines

**Contact us to discuss your special needs**

### Features

- ◆ Ruggedized for harsh environments
- ◆ High return loss and low crosstalk
- ◆ Compact size and package
- ◆ High transmission rates and low resistance
- ◆ Variety of configuration options
- ◆ Custom designs available

### Option

- ◆ Housing material/ Package style
- ◆ Over 200,200 hrs working life time
- ◆ Working in high shock environment
- ◆ Exceed 100km fiber data connector
- ◆ Integrated power channel and signal channel
- ◆ Single channel design and Multi channel design
- ◆ Single mode or Multimode & Single channel or Multichannel

# Hybrid Rotary Joint

Specification	
Performance	Index
Circuits	1 Circuit Fiber/ 30 Circuits
Working Speed	0-240rpm
Working Temperature	-40℃~+65℃
<b>Optical</b>	
Wavelength Range	1310/1550 nm (SM), 850/1310/1550 nm (MM)
Insertion Loss	<2 dB (Typical:0.5dB)
Insertion Loss Fluctuation	+/-0.25dB (Typical: +/-0.15dB)
Return Loss (SM )	>40dB
Fiber Types	SM/MM
Connector Types	FC/SC/ST/SMA /LC
<b>Electrical</b>	
Voltage Rating	240VAC/DC
Current Rating	1A/ Circuit
Dielectric Strength	500VAC@60Hz
Insulation Resistance	1000M $\Omega$ @500VDC
Electrical Noise	$\leq 0.1 \Omega$ (Typical: 0.05 $\Omega$ )
<b>Mechanical</b>	
Start Torque	<0.01Nm
Housing Materials	Aluminum Alloy
Lead Wire Size	AWG28 Silver Plated /300mm
IP	IP68 (Fiber Part)

