

GPS Over Fiber

For Timing and GPS Indoor Systems



JIETONG DIGITAL

GET CONNECTED

1164~1616 MHz **JTD-GOF101RO+GOF101LO**

The GOF is powered by 12V DC power supply to guarantee the stable operation of the system. The antenna interface connects to outdoor GPS antenna. The satellite signals received by Remote unit, the remote unit converts GPS signals into optical signals, Transmission through optical fibers, the local unit converts optical signal into GPS(RF) signals, and offer GPS signals to the RF output ports, the output ports connect to GPS receivers (BBU) or repeater antenna(for re-radiation). The gain is up to 40dB.

Optical fiber interface (round FC-APC interface) is used as the interface of transmitting signal remotely between remote unit and local unit via optical fibers.

This product can achieve outdoor waterproof grade: IP65; And can be equipped with a temperature control module, when the temperature is lower than or higher than the working temperature, the temperature control device will start, the equipment temperature control within the normal operating temperature range.

Key features

- Designed for 5G Timing and indoor signal forwarding applications;
- Frequency range: 1164~1616MHz;
- Gain: Fixed gain of 40dB;
- Optical fiber long-distance signal transmission;
- Operation Environment: meet IP65;
- Temperature control module inside (Optional) ;
- 12V DC power supply



Specifications

Technical characteristics

Parameter	Specification	Min.	Nominal	Max	Unit
Frequency range	Remote unit antenna	1164		1616	MHz
I/O impedance	Input, all output ports		50		Ω
Gain	40 dB	38		41	dB
Input voltage standing wave				2.0:1	-
Output voltage standing wave				1.5:1	-
Noise factor				4	dB
Pass band ripple	Antenna - unused port - 50 Ω load			3	dB
Maximum output power	Antenna - unused port - 50 Ω load	-30			dBm
DC input	DC 12V		12		VDC
Current	12V			30	mA
Optical wavelength	Sending (Remote unit)		1310		nm
Optical wavelength	Receiving (Local unit)		1310		nm
Optical output power	25 $^{\circ}$ C Sending (Remote unit)		8		dBm
Optical receive power	25 $^{\circ}$ C Receiving (Local unit)	-30			dBm
Light delay			5		ns
Optical fiber transmission	Sending (Remote unit)	60			Km
Operation Environment			IP65		
Working temperature	Normal	-20	25	65	$^{\circ}$ C
Working temperature	temperature control inside	-45	25	65	$^{\circ}$ C
Storage temperature		-30	25	80	$^{\circ}$ C

Applications

To expand GPS signal coverage or fill signal blind area where signal is weak or unavailable.

