

GPS Over Fiber RGOF Serial



- ✧ Designed for 5G Timing and indoor signal forwarding applications;
- ✧ Frequency range: 1150~1650Mhz;
- ✧ Gain: Fixed gain of 40dB;
- ✧ TX Power: 8dBm
- ✧ Receive sensitivity: -30dBm
- ✧ Optical fiber long-distance signal transmission up to 60KM;
- ✧ Power supply: dual 48V
- ✧ Powersupply: 12V DC (Optional) ;

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Description

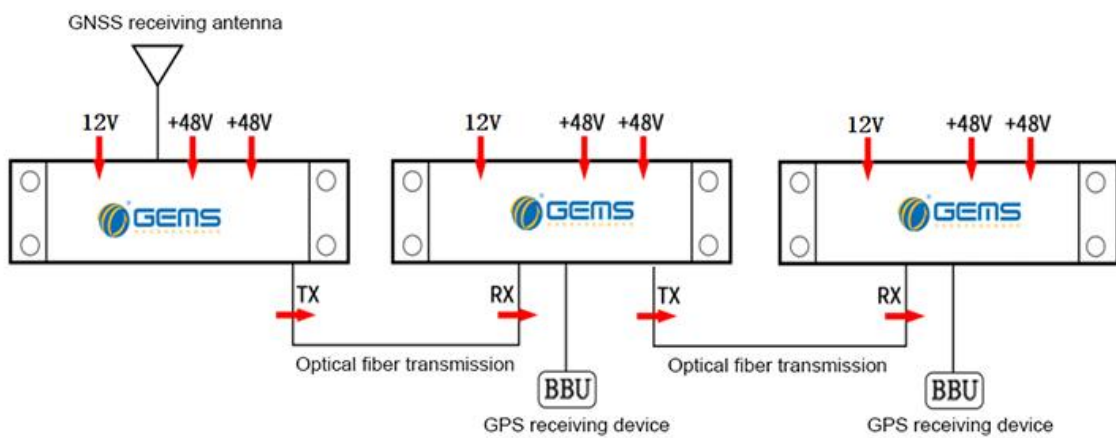
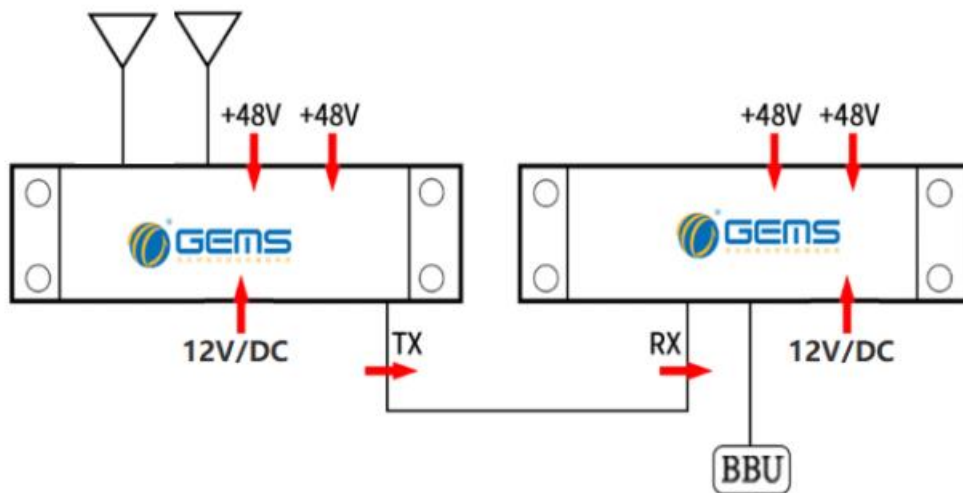
The RGOF is powered by dual 48V and 12V DC power supply to guarantee the stable operation of the system. The antenna interface connects to outdoor GPS antenna. The satellite signals received by Remote unit, the remote unit converts GPS signals into optical signals, Transmission through optical fibers, 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.

Electrical parameters

Parameter	Specification	Min.	Nominal	Max.	Unit
Frequency range	RF ports	1164		1616	MHz
I/O impedance	Input, all output ports		50		Ω
Gain	40dB	38		41	dB
Input VSWR				2.0:1	-
Output VSWR				1.5:1	-
Noise figure				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	9	12	16	VDC
DC input	48V	36	48	57	
Current	12V			200	mA
Current	48V			100	mA
Optical wavelength	Sending (Remote unit)		1310		nm
Optical wavelength	Receiving (Local unit)		1310		nm
Optical output power	25°C Sending (Remote unit)		8		dBm
Optical receive power	25°C Receiving (Local unit)	-30			dBm
Light delay			5		ns
Optical fiber transmission distance	Sending (Remote unit)			50	Km
Working temperature	Normal	-20	25	65	°C
Storage temperature		-30	25	80	°C

System connection



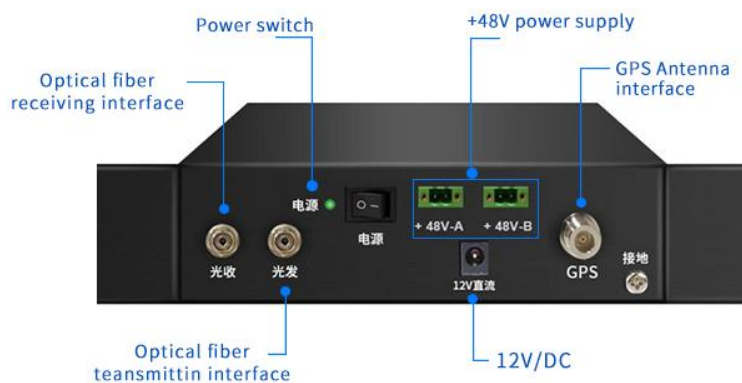
GPS-over-Fiber Timing Distribution System



TX unit



RX unit



Repeater unit

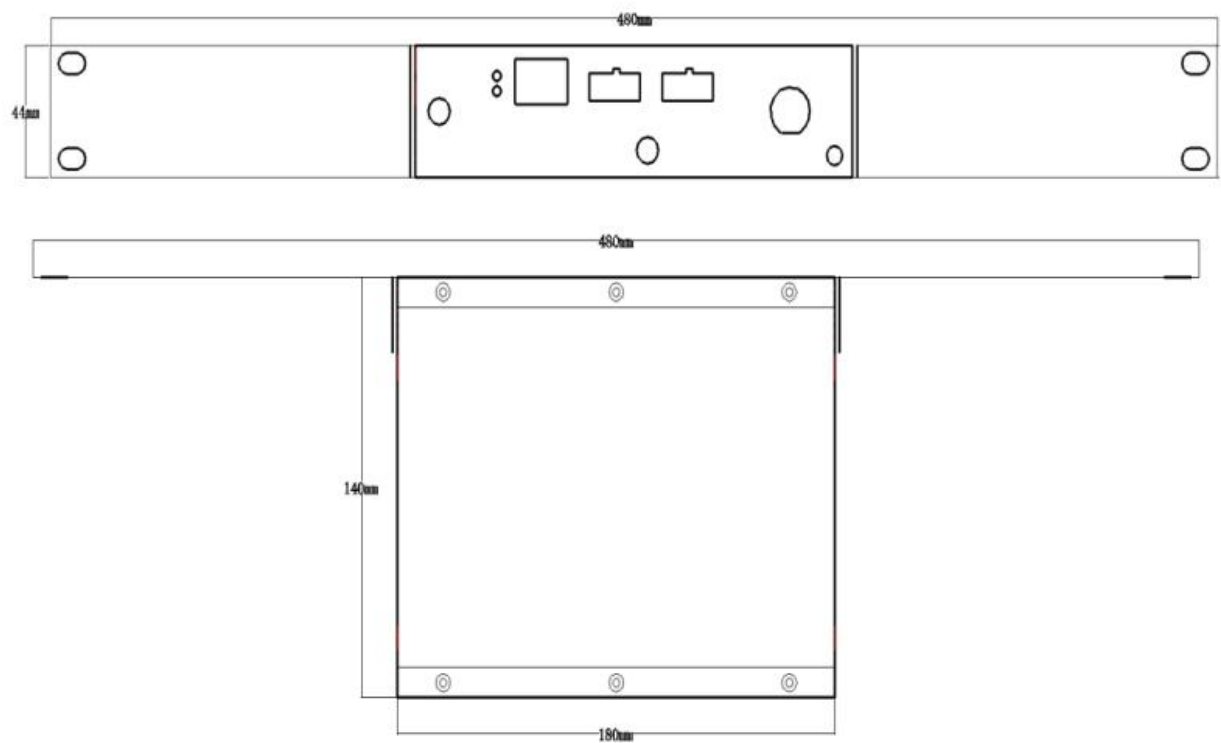
Operating Instructions

This system supports 48DC and 12V DC power supply. Input ports of Remote unit are connected to GPS antennas (N-type interface). When internal optical fiber module works normally, optical fiber is connected to the local unit through optical fiber interface (optical fiber interface is round FC-APC interface); local unit host output port connects to slave (GPS power divider and other distribution systems) or directly connects to BBU and other GPS Beidou receivers.

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



Product Dimensions



Ordering Informations

RGOF101TR

101TX: One antenn port; One optical transmit ports;
101RX: One RF port; One optical receive ports
201TX: Two antenna ports; One RF port;One optical ports;
201RX: Two RF ports; One optical ports;
202TX: Two antenna ports; Two optical ports
202TR: Two RF ports; One optical transmit port; One optical receive port