HOLUND ELEKTRONIKK AS

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Wireless Over Fiber Module

Varenr: 250-280

The Radio frequency over fiber transmission module ROF030TR-B designed for single RF port bidirectional RF/wireless signal transmission over long distance, which overcome the problem of high loss when the RF/wireless signal transmit over coaxial cable or free space. It integrate the transmitter, receiver, and a circulator or a duplexer in one compact package.

Profit

1. wide bandwidth for customer choose
2. Immune to RF jam
3. Different wavelength is available 1310nm/1490nm/1550nm or WDM
4. Compact size

Application

1. Radar antenna remote
2. For RF signal transmission over long distance
3. Wireless signal transmission.
4. GPS and other kind of navigation signal distribution
5. EW

Specification:

Parameters	unit	Typical value
Down link signal(From antenna to terminal link)		
Frequency range	MHz	790~960MHz (Other frequency band available according to customer application)
Total link Gain	dB	>25
Flatness	dB	≤ ± 1.5
Input P1dB	dBm	≥ -30
Noise Floor	dBm	<-120@10KHz
VSWR	NA	≤ 2:1
Input/output impedance	Ohm	50
Up-link signal(From terminal to antenna link)		
Frequency range	MHz	790~960MHz
Total link Gain	dB	>0
Flatness	dB	≤ ± 1.5
Output P1dB	dBm	≥25
VSWR	NA	≤ 2:1
Noise Floor	dBm	<-70@10KHz
Input/output impedance	Ohm	50
Power supply	VDC	6~12V
Power consumption	W	<2
Transmitter wavelength	nm	1310/1550

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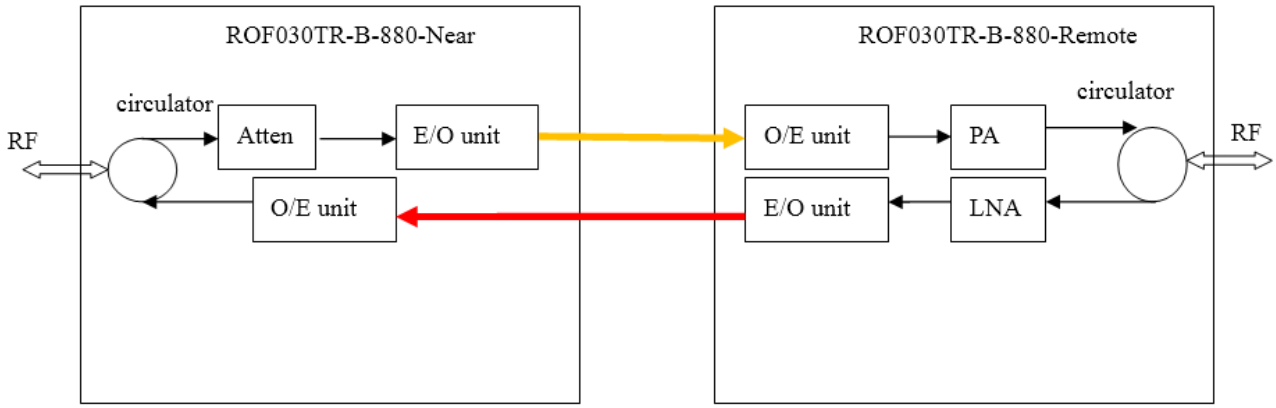
Transmitter optical power	dBm	>0
Receiver working wavelength range	nm	1100~1650
Optical connector	NA	FC/APC
RF connector	NA	SMA
Environment		
Operation temperature range	℃	-40 to 60
Storage temperature	℃	-55 to 85
Vibration		Per MIL STD-8108B Method 514 -5

Module structure diagram



In addition to adding a circulator at each end to achieve bidirectional functionality, add attenuators in the near-end module, and the remote module adds a power amplifier, so that the output power matches the smart meter and antenna power in your field.
In this way, after passing through the optical module, the wireless power transmitted to the antenna end can reach 500mW.

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Mechanical Specification Drawing