TMD151X (RF)

TMDO151X

(Optical Fiber)

1MHz to 10MHz Low Noise Frequency Amplifier and Distributor

The TMD1510 equipment provides 1MHz to 10MHz frequency source amplification and distribution.

The internal amplifiers ensure a very low phase noise
The equipment is in the form of a rack shelf 19 inches high 1U
This model has 12 independent outputs with the following characteristics:

- **Insulated outputs by transformer**
- **Harmonics <-30 dB**
- **Phase noise at 5MHz or10MHz is -162dBc/Hz for f>=10 KHz**

TMD151X/TMDO151X

The TMD01510 offers an optical link on top of the RF 10MHz distribution so that it can either transmit, receive or both. The RF 10MHz is then distributed over 12 coaxial outputs based on the optical fiber 10MHz input.

Operations

On the front panel, 2 LEDs provide the equipment status. ON LED indicates power is on and the FREQ ON LED indicates frequency input detection.

Whenever a frequency is detected at the input it is distributed at the 12 outputs

Alarm

A dry contact output provides Power and frequency outputs status.

Specifications

Inputs

Both inputs accept level signals from +1 to +13 dBm

Outputs

The outputs provide a maximum level of +13 ± 1 dBm on a 50 Ohms load on the 12 available outputs

The input / output ratio is 1 +-1dBm

AC power

230V AC Power supply
CEE 2P + T socket with mains filter,
M / A switch
Voltage: 85-264VAC / 47-440Hz
Power consumption: <20W to 230VAC over 50 Hz per power supply

Connections

The input and output signals are done via the rear panel of the equipment
The connectors for the two inputs and the 12 outputs are insulated BNC Female type and SC/APC Singlemode for optical.
The alarm connector is a DB9 female type

Temperature

Operating temperature: -10 ° to 60 ° C
Storage temperature: -20 ° to 70 ° C
Operating relative humidity: 10% to 90% (non-condensing)
Storage relative humidity: 5% to 95% (non-condensing)

Performance

RF phase noise floor (with appropriate source)

1Hz	-115 dBc/Hz
10Hz	-135 dBc/Hz
100Hz	-150 dBc/Hz
1KHz	-155 dBc/Hz
≥ 10KHz	-162 dBc/Hz

Optical fiber phase noise floor (with appropriate source)

1Hz	-90 dBc/Hz
10Hz	-120 dBc/Hz
100Hz	-140 dBc/Hz
1KHz	-140 dBc/Hz
≥ 10KHz	-140 dBc/Hz

Spurious : < -65 dBc
Harmonics : < -30 dBc

Alarm

Power supply and Frequency alarm are output as dry contacts.

Dimensions

Rack 1U 19'' Depth 320 mm

Weight

< 3 Kg

MTBF

> 150 000h

Consommation:

< 20 W

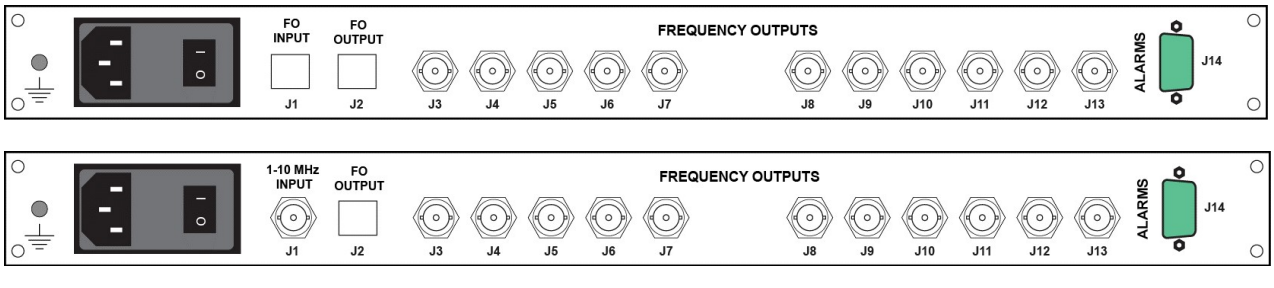
Certification

EU, ROHS and ITAR free

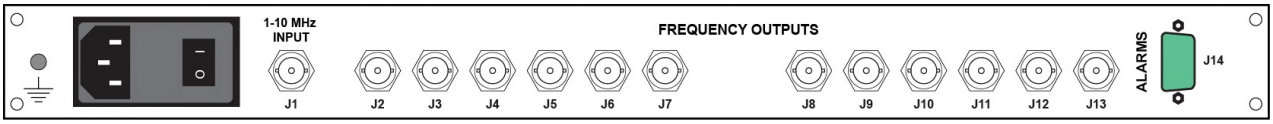
Options

SMA Connector type (non insulated)

Additional DC power supply



TMDO1510 rear panel (-RT above and -T below)



TMD1510 rear panel

Ordering Code:

TMD1510: standard model
TMDO1510-T: RF to Optical Fiber
TMDO1510-R: Optical Fiber to RF
TMDO1510-RT: Optical Fiber to RF and optical