

TMD2313

10MHz

Low Noise
Frequency
Switch,
Amplifier and
Distributor

The TMD2313 equipment provides switching between two 10 MHz frequency sources, amplification and distribution of these frequencies

The internal amplifiers ensure a very low phase noise

The equipment is a 1U rack mountable 19 inches unit.

This model has 12 independent outputs with the following characteristics:

- Isolation between channels > - 50 dB
- Harmonics <-40 dB
- Phase noise <160dBc/Hz >10KHz

Operations

On the front panel, 2 push buttons combined with 2 groups of 3 LEDs allow to:

- Select the mode:
Automatic or Manual
- Select the source in manual mode
Source A or Source B
- Indicate the selected source
- Indicate the status of the source

Remote control

Remote monitoring and control are done via an Ethernet 10/100 Mbit/s connection using either HTTP or a proprietary UDP protocol. It provides the equipment status and allows configuring the mode of operation.



TMD2313 front panel

Specifications

Inputs

Both inputs accept signals level from +10 to +13 dBm \pm 1 dBm

Outputs

The outputs provide a maximum level of +13 dBm \pm 2 dBm on a 50 Ohm load on the 12 available outputs.

The input / output ratio is 1 +1dBm.

The outputs are not isolated

Switching

Fault detection time is < 40ms

Switching time is < 50ms

Redundant AC power

2 x 230V AC Power supply

CEE 2P + T socket with mains filter,

ON/OFF switch

Voltage: 85-264 VAC / 47-440Hz

Power consumption: <20W to 230VAC over 50 Hz per power supply

Connections

The input and output signals are located on the rear panel of the equipment.

The connectors for the two inputs and the 12 outputs are non-isolated SMA Female type.

The remote-control connector is an RJ45 type

Performance

Phase noise (with perfect source)

1Hz -110 dBc/Hz

10Hz -135 dBc/Hz

100Hz -150 dBc/Hz

1KHz -155 dBc/Hz

\geq 10KHz -160 dBc/Hz

Spurious: < -80 dBc

Harmonics: < -30 dBc

Added Phase Noise: +1dBc/Hz

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)

Dimensions

Rack 1U 19" depth 320 mm

Weight

< 3.5 Kg with the 2 AC power cables

MTBF

> 150 000h

Certification

Certification with EU, ROHS et ITAR free



TMD2313 rear panel

Ordering Code:

TMD2313: standard model

TMD2210: 10 BNC outputs / 2U option