

# TMF1521

## Ultra low noise frequency source

The TMF1521 is an autonomous frequency reference very high precision and very low phase noise.

It comes in 1U 19" rack.

### KEY FEATURES

The TMF1521 is used when an autonomous source of stable and accurate frequency is needed.

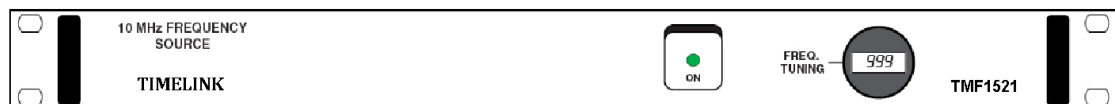
If a fine adjustment is needed, a potentiometer on the front panel of the rack allows this type of operation on the oscillator.

All the outputs are located on the rear face of the equipment. There is a choice between 6 or 12 outputs. 10 MHz sine outputs or 5 MHz and BNC or SMA outputs.

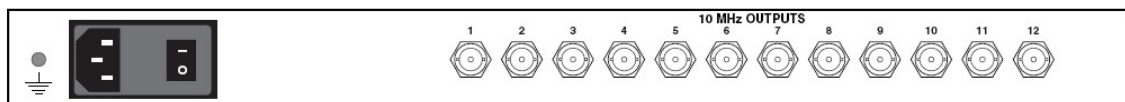
A standard CEE power supply connector for 230 VAC power supply is provided with fuse, filter and On/Off switch.

### Oscillator

The internal oscillator is a very low noise OCXO with good ratio of short & long term stability.



### Front panel



### Rear face

## Spécification

Reference Frequency	10 MHz
10MHz Frequency outputs level	13 dBm $\pm$ 1dBm max on 50 Ohm. Fix value adjusted in factory.
Isolation between Outputs	50 dB
	1Hz < -100 dBc
	10Hz < -130 dBc
Phase Noise	100Hz < -145 dBc
	1KHz < -150 dBc
	$\geq$ 10KHz < -160 dBc
Harmonics Distortion	< - 50 dBc
Spurious	< -90 dBc
Stability	
From [0...50°] C	< $\pm$ 5.10 <sup>9</sup>
1 second	< $\pm$ 1.10 <sup>-12</sup>
10 seconds	< $\pm$ 1.10 <sup>-12</sup>
1 day	< $\pm$ 5.10 <sup>-10</sup>
1 month	< $\pm$ 5.10 <sup>-9</sup>
1 year	< $\pm$ 3.10 <sup>-8</sup>
Time to get $\Delta F/F$	= $\pm$ 5.10 <sup>-8</sup>
Température	Temps
T = 25°C	120 Secondes $\pm$ 5.10 <sup>-8</sup>
Frequency Adjustment tuning	$\pm$ 3.10 <sup>-7</sup> < $\Delta F/F$ < $\pm$ 5.10 <sup>-7</sup>
OUTPUTS Connectivity	BNC for frequency
Tuning control	Trimmer in front panel
Dimensions : L = 19" (483 mm), H = 1U (44.5 mm), D = 280 mm, Max: 483 x 45 x 340 mm.	
Weight : < 5 Kg	
Consumption : 30 W	
MTBF = 95 000 h	
AC = 85-265 VAC / 50-60Hz	

### Ordering information

TMF1521: Standard Frequency Source 12 outputs

**POSSIBLE OPTIONS:** 6 outputs, 5MHz frequency, SMA outputs

