

SR2000

GPS synchronised frequency generator

Functions

- The SR2000 equipment is a high stability frequency generator, GPS synchronised. This equipment is housed in a 19", 2U rack or 1 U depending on the oscillator type.
- Different type of oscillators could be used : OCXO Pulsar type or Rubidium. The oscillator is disciplined using a GPS receiver in order to assume a high level of long term stability.
- On the front face, a LCD display is located to show the satellite visibility and the different operating modes of the equipment. The current status of the system is show by 3 Leds (power supply, GPS OK, oscillator OK).
- A six keys keyboard is used to drive the man machine interface and to select the menus & status values.
- The equipment integer a GPS receiver able to acquire simultaneously 12 satellites. This module delivers a high stability 1 PPS available in output.
- All the inputs/outputs of the equipment are located on the rear face. There is twelve connectors :
 - One GPS antenna input,
 - 10 x 10 MHz sinus outputs,
 - One RS232 output dedicated to the remote control of the equipment.
- The SR2000 is provided with the Windows software for control/command of the equipment.
- A standard CEE 230V AC connector with fuse and filter and On/Off switch is also located on the rear face.

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Specifications

Precision of the 1 pps : < 20 ns with GPS receiver (12 channels). The receiver must be locked in fixed position.

Internal oscillator : 10 MHz OCXO or 5 MHz – 10 MHz Rubidium.

Frequency output : frequency output equal to the frequency of the internal oscillator. 10 or 5 MHz, level: +13 dBm/ 50 Ohm.

Remote control : remote control and parameter set up using asynchronous serial link. RS232 level.

GPS antenna : two choices : miniature antenna with magnetic fixation and 6m cable. Ruggedized antenna delivered with mounting tube.

Connectors : BNC for analog and digital signals, Sub'D female 9 pins for RS232 link.

Dimensions : W = 19" (483 mm), H = 1U (44.5 mm), or 2U, D = 295 mm,

Weights : 5 Kg

Consumption : 30 W

MTBF = 65 000 h

Ordering information

SR2000-1-10 with 10 MHz OCXO oscillator

SR2000-1- 5 with 5 MHz OCXO

SR2000-2-10 with 10 MHz Rubidium

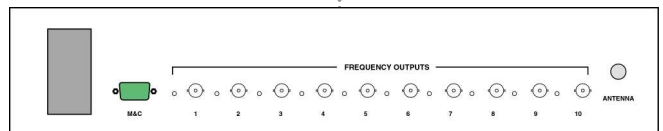
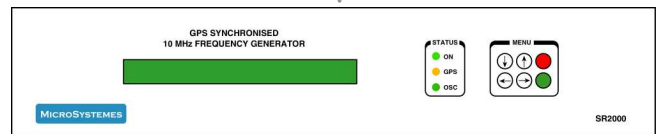
Stability with OCXO & Rubidium

	SANS GPS	AVEC GPS
JOUR	<2.10 ⁻¹⁰ ±1.10 ⁻¹²	±1.10 ⁻¹¹ ±1.10 ⁻¹²
MOIS	<5.10 ⁻⁸ 5x10 ⁻¹¹	±1.10 ⁻¹¹ ±1.10 ⁻¹²
AN	<5.10 ⁻⁸ 5x10 ⁻¹⁰	±1.10 ⁻¹¹ ±1.10 ⁻¹²

Phase noise

10 Hz	<-125dBc/Hz -98dBc
100 Hz	<-140dBc/Hz -137 dBc
1 KHz	<-145dBc/Hz -150dBc
10 KHz	<-150dBc/Hz -156 dBc

Front face and rear face



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