

GPS REFERENCE CONTROL PAREL

The GPS controlled receiver for time/frequency reference allows to distribute up to 6 reference signals '10 MHz' and up to 6 signals '1 PPS' (Pulse Per Second) thanks to the integrated professional GPS receiver.

This device can therefore be used in all those scenarios where a time reference common to multiple devices is needed: e.g., in SFNs (Single Frequency Networks) with digital DVB-T transmitters, or in laboratory measurements with high precision temporal sources.

TECHNICAL SPECIFICATIONS*

 $^{\ast}\ensuremath{\mathsf{specifications}}$ may be changed in accordance with the technical department

GPS RECEIVER Number of channels Acquisition and tracking time Sensitivity	50 1 min -160 dBm	TRACKING, FILTERING, HOLDOVER OCXO performance ageing OCXO performance thermal	1E-10 1E-9 peak to peak
1 PPS		COMMUNICATION INTERFACES	1 OObaseT - TCP/IP, HTTP
Number of outputs	6 (BNC connectors)	RS232	9600, 8, N, 1
Holdover PPS 10 µs duration	$24 \text{ h} (\pm 10^{\circ}\text{C or} \pm 25^{\circ}\text{C})$		7000, 0, IN, I
Phase stability when locked	±30 ns typ.	GENERAL	
Level	3.3 Vpp / 1 kΩ	Antenna connector	N, female, 50 Ω
		Primary power supply	110 ÷ 240 Vac
10 MHz		DC Backup	36 ÷ 72 Vdc
Number of outputs	6 (BNC connectors)	Operating temperature	-20 ÷ +65 °C
Phase alignment	±5 ns @ 25°C	Storage temperature	-25 ÷ +80 °C
Phase noise	-125 dBc @ 10 Hz	Storage relative humidity	10% ÷ 80%
(10 MHz sine)	-140 dBc @ 100 Hz	Dimensions	Rack 19'' 1U
	-140 dBc @ 1 kHz		(483 × 45 × 270 mm)
Level of 10 MHz square	3.3 Vpp / 1 kΩ	Protection degree	IP50

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