3207A GlobalTyme™ 2 advanced GPS/GNSS Receiver

Single Module Version

- **GNS Tracking: 34 parallel channels**
- **GPS, Glonass, QZSS, SBAS, Beidou (Galileo Ready)**
- **Optional 2nd Receiver (GNS/Galileo)**
- **Accuracy (1PPS): <20ns**
- **100/10 Base T Ethernet**
- **NTP v4 (optional)**
- **Monitor/Control i/f**
  - **Web Browser**
  - **Telnet**
  - **Serial**
- **Alarm indicator and output**
- **GNS antenna and cable included**
- **Available in 1U and 2U**

The ***ptf*** 3207A GlobalTyme™2 GNS Receiver introduces a new level of advanced capability from a second generation, based on the highly successful ptf 3203A and ptf 3204A GlobalTyme™ receivers.

With its extraordinary stability and highly flexible approach, this unit provides numerous input source options, the latest updates in industry standard protocols, and comes ready to accept a Galileo receiver engine. Available in both 1U and 2U versions, the GlobalTyme 2™ unit can be configured as a high performance frequency standard, comprehensive time standard, or both.

Frequency standard performance is application tailored with a range of local oscillator options including TCXO(standard), OCXO, Ultra Low noise oscillator, rubidium, and high performance rubidium. In standard configuration the GlobalTyme 2™ is equipped with 10MHz (options to add 100kHz, 1MHz, and 5MHz), 1PPS and IRIG B(am) outputs. Additional options for selectable output clock frequencies are also available.

For timing, synchronization and time keeping, the unit provides optional NTP(v4), in addition to the standard 1PPS and IRIG B outputs. The 1PPS output is accurate within <20ns (1 sigma) of UTC(USNO).

The optional 1PPS, IRIG, and 10MHz inputs offer system redundancy or simply alternative master reference inputs to gps or Galileo if desired.

For monitoring and control the unit houses both RS232 serial and 100/10 BaseT Ethernet (RJ 45) with various protocols suited to different user needs including Telnet, SNMP(optional) and a browser driven web interface.

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Specifications

GPS Rx 26 parallel channel (plus optional 2nd receiver)

Front Panel Display Vacuum Fluorescent

RF Outputs

10MHz sine wave	1V rms into 50 ohms
5MHz (opt)	1V rms into 50 ohms
1MHz (opt)	1V rms into 50 ohms
100kHz(opt)	1V rms into 50 ohms

Digital Outputs

1PPS	5V CMOS into 50 ohms
Prog	5V CMOS into 50 ohms

Pulse Rates(opt)
(1PPS to 10MPPS)

Timing Outputs

IRIG B(am)	3v p-p into 600 ohm
IRIG B(DCLS)opt.	5V into 50 ohm

IEEE 1344 compliant

Standard configuration offers 10MHz sine wave, IRIG B(am) and 1PPS outputs

100/10 Ethernet i/f RJ-45 Connector
Telnet monitoring/configuration/control
HTTP configuration control
DHCP TCP/IP auto configuration
NTPv4(optional)
SNMPv1/2/3(optional)

Serial Interface

RS232	Control/Monitor(DB9)
RS232(opt)	Time Output(DB9)

Accuracy

10MHz	<2E-12 (Locked to GPS)
1PPS	<20ns wrt UTC (1 sigma)
NTP	<10ms (typical)

Stability (Allan Deviation)

	TCXO	OCXO	ULN	RUB
1s	2E-10	<3E-11	3E-11	2E-11
10s	2E-10	<2E-11	2E-11	9E-12
100s	1E-9	<2E-11	3E-12	1E-12

Phase Noise(ssb)

	TCXO	OCXO	ULN	RUB
1Hz	-72dBc	-96dBc	-108dBc	-90dBc
10Hz	-93dBc	-130dBc	-125dBc	-130dBc
100Hz	-115dBc	-155dBc	-150dBc	-145dBc
1000Hz	-126dBc	-162dBc	-160dBc	-150dBc
10kHz		-162dBc	-165dBc	-150dBc

Spurious (OCXO option)

Offset from carrier

1kHz to 200kHz	<-100dBc
200kHz to 1MHz	<-80dBc
1MHz to 10MHz	<-80dBc

Front Panel Indicators

Fault	Amber LED
Lock	Green LED
Power	Green LED

Environmental/Physical

Temperature

Operating	Unit		-25 to +55 deg C
	Ant		-40 to +85 deg C
Storage		Unit	-20 to +70 deg C
		Ant	-40 to 100 deg C
Humidity		unit	0-95% RH (non-condensing)
	Ant		Mil-STD-810E

Power Requirements

AC input (+/-15%)	90-264 VAC
DC input(opt)	18V to 72V DC

Dimensions

3207A	1Ux19”x16”
	2Ux19”x16”
Relative Humidity	0-95% (non-cond.)

CE **ISO 9001-2008**

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