3207A GlobalTyme™ 2 advanced GPS/GNSS Receiver

Single 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.

50L Audubon Road, Wakefield, MA 01880, USA
Tel: (+1) 781 245 9090 Fax: (+1) 781 245 9099 www.ptf-llc.com rev T

Precise Time and Frequency,LLC

Specifications

GPS Rx **34** parallel channel (plus optional 2nd receiver)
Front Panel Display Vacuum Fluorescent 1"Ht. DDD:HH:MM:SS

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 50 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, TP(TCP/UDP, RFC 868)(optional)
SNMPv1/2/3(optional)

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

Accuracy(24 hr)
10MHz <1E-12 (Locked to GPS)
1PPS <20ns wrt UTC (1 sigma)
<100ns (3 sigma)
NTP <10ms (typical)

CE **ISO 9001-2015**

Stability (Allan Deviation)

	TCXO	OCXO	ULN	RUB
1s	2E-10	<1E-11	3E-11	1.2E-11
10s	2E-10	<1E-11	2E-11	1.2E-11
100s	1E-9	<1E-11	3E-12	1.2E-11
1 Day	3E-12	<2E-12	1E-12	2E-13
Long Term		7E-14		3E-14

Phase Noise(ssb)

	TCXO	OCXO	ULN	RUB
1Hz	-72dBc	-102dBc	-108dBc	-102dBc
10Hz	-93dBc	-130dBc	-125dBc	-130dBc
100Hz	-115dBc	-155dBc	-150dBc	-155dBc
1000Hz	-126dBc	-162dBc	-160dBc	-162dBc
10kHz		-162dBc	-165dBc	-162dBc

Aging

		OCXO	ULN	RUB
1 day		<2E-10	<2E-10	<2E-12
1 month		<1.2E-8	<1.4E-8	<5E-11
1 year		<1E-7	<1E-7	<1E-10

Harmonics < -40dBc
Spurious (OCXO option) <-80dBc
Front Panel Indicators
Fault Amber LED
Lock Green LED
Power Green LED

Environmental/Physical
Color Grey
Temperature
Operating Unit -25 to +55 deg C
Ant -40 to +85 deg C
Storage Unit -25 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
Input Power <15W

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

Specifications subject to change without notice

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