# GPS4000 Time Receiver

Providing high accuracy GPS precision timing with anti-jam capability



The *GPS4000* is the ideal solution for high accuracy GPS timing in the most demanding applications. Incorporating advanced anti-jam technology and cable delay compensation, the GPS4000 provides you with precision timing over long cable runs and in noisy or hostile RF environments.

## **Key Benefits:**

- High accuracy GPS timing system with anti-jam technology
- 50 nsec PPS accuracy with cable delay compensation
- Surface mounting antenna bracket and decoder enclosure with a choice of cable lengths
- Compatible with MC1000 / MC2000 ntp servers
- Optional lightning arrestor
- 5 year warranty



#### **GPS4000 Model Variations & Options**

Part Number Variation / Option

GPS4000-05 GPS4000 with 8m (25ft) antenna cable and 5m (15ft) output cable GPS4000-15 GPS4000 with 8m (25ft) antenna cable and 15m (50ft) output cable GPS4000-50 GPS4000 with 8m (25ft) antenna cable and 50m (150ft) output cable

GPS4000-TNC1 1m (3ft) antenna cable
GPS4000-TNC15 15m (50ft) antenna cable
GPS4000-TNC25 25m (80ft) antenna cable

GPS4000-WALL Stainless steel wall mounting antenna bracket
GPS4000-SPD Lightning arrestor / Surge protection device

### **GPS4000 Technical Specifications**

#### **Typical Performance Specifications:**

PPS accuracy: 50 nsec RMS

**GPS Specifications:** 

Antenna gain / noise:  $30 \text{ dB} \oplus 25 \text{ °C} / 3.3 \text{ dB max} (25 \text{ °C} +/-5 \text{ °C})$ 

GPS engine: 50 channel GPS L1 C/A

GPS module RF reception -160 dBm (tracking), -160 dBm (reacquisition), -147 dBm (cold start),

sensitivity: -156 dBm (hot start

I/O Connections:

I/O connection: Single 1000 Series communication port for connection to an MC1000 or

MC2000 network time server

Mechanical, Electrical & Environmental Specifications:

Antenna dimensions:  $77.5 \times 66.2 \text{ mm } (3.05'' \times 2.61'')$ 

brackets, excluding cable grommet and TNC)

Decoder module enclosure: Light grey polycarbonate body with clear cover.

System weight: 1.5 kg (excluding output cable)
Antenna cable: 8m (25ft) RG58CU TNC to TNC

Output cable: Two pair plus drain 7x32 (24 AWG) stranded cable with 100% foil shield

and semi-rigid, sunlight resistant, Polyvinyl Chloride (PVC) jacket.

Operating temperature: -30 to +50 oc

Relative humidity: 0% - 95%, noncondensing

Standards Compliance:

Electrical safety: BS EN 60950-1:2006

Radio disturbance: BS EN 55022:2006 (class B)

Immunity characteristics: BS EN 55024:2003



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