

## »» GPS6000-PRO

HIGH ACCURACY TIMING FOR YOUR TIME SERVER



### KEY BENEFITS

High accuracy timing for your time server

Reliable performance, even in weak signal and hostile RF environments

30 nsec timing accuracy

Multi-constellation support (GPS/GLONASS/Galileo ready)

Simple installation into your data centre using existing cat 5 structured cabling

The GPS6000-PRO Time Receiver accurately synchronises your time server with international atomic standards.

#### ACCURATE TIMING

The GPS6000-PRO provides highly accurate time data. With 32 satellite parallel tracking and class-leading high performance design, the GNSS decoder supplies time data accurate to within 30 nsec of UTC. The user programmable cable delay compensation ensures timing accuracy is maintained, even over long cable runs.

#### RELIABLE PERFORMANCE

The system has been engineered to ensure reliable performance. The high sensitivity GPS6000 decoder allows for operation in the most demanding weak signal and hostile RF environments. The GPS6000 fully integrates with your time server, providing real time diagnostics and active antenna monitoring. Advanced anti-jam technology and multi-constellation support further increase system reliability.

The GPS6000-PRO is supplied with a ruggedised high gain anti-jam antenna, a multi-strike fast response lightning arrester and military grade coaxial cabling.

#### SIMPLE INSTALLATION

Installing the GPS6000 is simple. All cables are supplied pre-terminated. The GPS6000 has also been purpose designed to allow cost saving installation into your data centre, optionally connecting to your time server via existing cat 5 structured cabling.

**Timing performance:**

Synchronised accuracy: 30 nsec (1 sigma)

**GNSS decoder:**

**GNSS engine:** Anti-jam capable, multi-constellation, 32 satellite parallel tracking

**Minimum acquisition sensitivity:** -148dBm (cold start)

**Minimum tracking sensitivity:** -160dBm

**Operating temperature:** 0 to 50°C

**Relative humidity:** 0% - 95%, noncondensing

**Enclosure:** 85 x 65 x 30mm (3.35" x 2.56" x 1.18") aluminium enclosure with wall mount brackets

**Weight:** 0.2 kg

**Cable delay compensation:** User programmable

**Status monitoring:** Fully integrated diagnostic system with active antenna monitoring. Multi-colour status LED

**Antenna:**

**Antenna:** Waterproof (to 1m), corrosion resistant multi-constellation anti-jam antenna. Designed to withstand extreme temperature environments, excessive vibration, rain, snow and sunlight

**Gain:** 30dB (@ 25°C)

**Noise:** 3.3dB max (25°C +/-5°C)

**Azimuth coverage:** 360° (omni-directional)

**Elevation coverage:** 0° to 90° (hemispherical)

**Operating temperature:** -40°C to +80°C

**Dimensions:** 78 x 66mm (3.05" x 2.61")

**Antenna mount:**

**Antenna mount:** 105mm (4.13") stainless steel antenna mount

**Lightning arrester:**

**Lightning arrester:** Multistage, multi-strike fast response

**Cabling:**

**Antenna cable:** 8m (26ft) pre-terminated RG-58C/U TNC to TNC coaxial

**Arrester cable:** 1m (3ft) pre-terminated RG-58C/U TNC to SMA coaxial

**Output cable:** 5m (16ft) pre-terminated Belden 9502 (two pair plus drain 24 AWG stranded cable with 100% foil shield and semi-rigid, sunlight resistant, Polyvinyl Chloride (PVC) jacket)

**Warranty & Support:**

**Warranty:** 5 years

**Support:** Free-of-charge lifetime technical support

**Standards compliance:**

**Electrical Safety:** BS EN 60950-1:2006

**Radio Disturbance:** BS EN 55022:2006

**Immunity Characteristics:** BS EN 55024:2003

**RoHS:** RoHS-Compliant

**Scope of supply:**

**GPS6000-PRO scope of supply:** 1 x multi-constellation GNSS decoder  
1 x multi-constellation anti-jam antenna  
1 x antenna mount  
1 x lightning arrester  
1 x 8m antenna coax cable  
1 x 1m arrester coax cable  
1 x 5m output cable

**Options:**

**GPS6000-ANT-15:** 15m (49ft) antenna cable

**GPS6000-ANT-25:** 25m (82ft) antenna cable

**GPS6000-OUT-15:** 15m (49ft) output cable

**GPS6000-OUT-50:** 50m (164ft) output cable

**GPS6000-OUT-150:** 150m (492ft) output cable

**GPS6000-PRO-GPS:** GPS6000-PRO with GPS only support

**GPS6000-PRO-GLONASS:** GPS6000-PRO with GLONASS only support

*(Non-standard cable lengths are available upon request)*