# Powerlink Time Sync Module



# Satellite GPS Based Time Source

- Satellite GPS based time source
- Dual outputs, IRIG-B & 1PPS
- Accuracy 5 microseconds
- No Coax to install or terminate
- Designed for timing applications
- Conical enclosure to shed snow.



Increasingly Power companies and other utilities are demanding accurate timing of events to aid the quick identification of faults and speedy resumption of essential services. The **Powerlink Time Sync module** is a self-contained GPS based time source, generating highly accurate outputs, that meets these requirements

With two outputs, one of which is selectable for different formats, the **Powerlink GPS Time Sync module** offers different timing functions to match equipment with which it is connected. The fully rated exterior enclosure offers outstanding performance in the industrial environment ensuring a long life.

## **Uses Include:**

Synchronise electrical substation Intelligent Electronic Devices (IEDs), protection relays, power meters, circuit breakers, reclosers, Load Management System - Injection Controllers & Remote Terminal Units with an IRIG-B input.







# **Powerlink Time Sync Module**

## General Characteristics

Antenna Motorola Timing2000

Active Antenna 25 dB gain

<1.5dB typical noise figure

40dB minimum filtering at +/- 50MHz L1 (1575.42 MHz, +/-2MHz)

Motorola M12+ Timing Oncore 12 channels

Satellite Reception Time to Position hold 2.5 hours Azimuth Coverage 360° 0° to 90° Elevation

Output Impedance 50 ohms, 0V/+5V swing unloaded output impedance

Supply Voltage 8-30 VDC Power Consumption 250mA max

#### Standards

**IEEE 1344** 

### Inputs / Outputs

Operating Frequency GPS Receiver

Output 1 IRIG-B unmodulated

Output 2 1-PPS

RS-232 port Configuration changes and updates after installation

### Cabling

Cable 10 metres of BELDEN 1421A or AWM 2919

High quality four twisted pairs of stranded wire, with a foil screen, drain wire and

reinforcing thread

Max cabling distance ~50 metres

#### Mechanical

Dimensions 102mm dia, 82mm height

Weight 320g + cable

Connector Unterminated bare cable Pole mount bracket provided Mountina

Case type Moulded UV- resistant plastic conical radome

Aluminium die cast bottom housing

### **Environmental**

Temperature -20°C to +80°C

85% non-condensing +30 to +60C Humidity

UV Radiation JIS D0202 (Sunshine Carbon Arc System)

Salt Spray Test Spray 5% NaCl solvent at 35°C

### Ordering Information

Abbey Systems Part No B07-061

The GPS (Global Positioning System) facility is operated by the United States government, which is solely responsible for its accuracy and maintenance. The system may be subject to changes which could affect the accuracy and performance of all GPS equipment.

Motorola and the stylised M logo are registered in the US Patent & Trademark Office.

Specifications are subject to change without notice

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