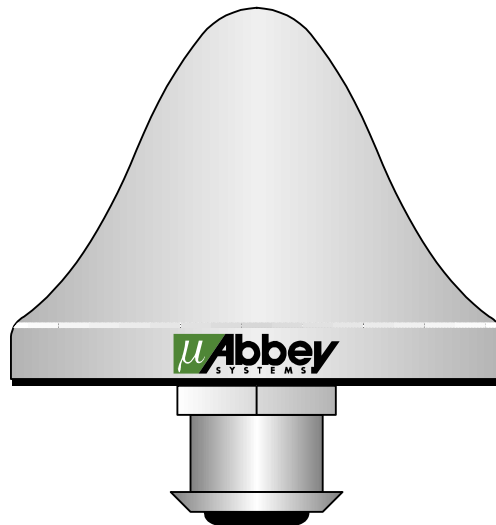


Powerlink Time Sync

Model B07-061

Installation Guide



Introduction

The B07-061 Time Sync Unit is a self-contained time sync signal generator, consisting of an active antenna, GPS receiver and timing signal generation in a peaked enclosure with permanently attached cable exiting from the base.

Operation

The Time Sync Unit is optimised for timing performance. It takes longer than a conventional GPS unit to get a position fix (often up to 30 minutes) but once it is sure of its position (this requires a minimum of 2.5 hours or uninterrupted operation) it can return very accurate timing from a single GPS satellite. It will retain this position information over a loss of power.

Mounting

The Time Sync is supplied with a stainless steel mounting bracket and u-bolts for pole mounting. The bracket can be mounted on a pole up to 50mm in diameter, or attached directly to a flat surface so long as it has an unobstructed view of the sky.

Connections

<u>Wire</u>	<u>Tracer</u>	<u>Function</u>	<u>Characteristics</u>
White	Orange	Supply +	8-30V DC, 250mA max draw.
Orange	-	Supply -	Common negative to all signal lines.
White	Brown	1PPS +	Rising edge on-time; 0V/+5V swing; output impedance 50Ω.
Brown	-	1PPS -	
White	Blue	IRIG-B +	Unmodulated 0V/+5V swing unloaded; output impedance 50Ω.
Blue	-	IRIG-B -	
White	Green	Tx Data	RS-232 transmit data. Factory use only.
Green	-	Rx Data	RS-232 receive data. Factory use only.
Foil Screen		Shield	Connect to a good earth point.

Specifications

Dimensions	102mm diameter, 82mm height
Case type	Molded UV- resistant plastic conical radome. Aluminum die cast base.
Mounting	Stainless steel mounting bracket and pole clamps included.
Antenna	Motorola Timing2000 Active Antenna 25 dB gain; <1.5dB typical noise figure; 40dB minimum filtering at +/- 50MHz
GPS receiver	Motorola M12+ Oncore Timing in T-RAIM mode
Satellite reception	12-channel
Time accuracy	±5µs on both outputs
IRIG-B Options	Standard IRIG-B, Abbey Extended, IEEE-1344; UTC offset (factory setting)
Operating temp	-20°C to +70°C
Cable	10 or 25 metres of BELDEN 1421A or AWM 2919. High quality four twisted pairs of stranded wire, with a foil screen, drain wire and reinforcing thread
Connector	Unterminated bare cable
Ordering	B07-061/10 (10m cable); B07-061/25 (25m cable)

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Document Number	IG-638-1.2-2012-Jun
Products Covered	B07-061/xx
Revision Number	1.2
Revision date	14 June 2012

