



GPS receiver 122980-51



GPS antenna/receiver

The GPS-receiver is intended for outdoor mounting and the antenna needs clear view upwards.

The receiver can be mounted on a mast by using a clamp or directly to a wall by using the enclosed aluminium bracket. It is also possible to remove the aluminium bracket and mount the enclosure directly to a roof.

A built in LED indicates the signal reception.

Connection to the master clock is done with 3 wires.

General

The Global Positioning System (GPS) is a satellite based navigation system. GPS is a constellation of 24 or more satellites providing world-wide, 24 hour, and three dimensional (3D) coverage.

The satellites broadcast radio signals to provide their locations, status, and precise time from on-board atomic clocks. By computing the distance to satellites orbiting the earth, a GPS receiver can calculate an accurate position and time.

GPS is the most accurate technology available for easy timing.

Westerstrand GPS unit uses a miniature 66-channel GPS. Its compact size and low power consumption make it ideal for this application.

Technical Specifications

Sensitivity

Acquisition:	-148dBm, cold start
Reacquisition:	-163dBm, Hot start
Tracking:	-165dBm
Timing accuracy:	± 10ns RMS
Time To First Fix (TTFF)	
Hot start:	1 second typical (with battery, GPS switched off less than 2 hours),
Warm start:	33 seconds typical (with battery, GPS is switched off more than 2 hours)
Cold start:	35 seconds typical (without battery)
Antenna noise figure:	< 1.5dB
Operating temp:	-40°C to +80°C
Prime power:	+8V to 35V (Power supply from Master Clock / Time Central)
Power consumption:	0.2 watt (nominal)
Backup power:	3V lithium battery
Antenna:	Compact, active antenna. Short circuit protection
Connection wire:	3 x 0.25mm ² shielded, maximum length 300m Cable example: ELAKY/ELAQBY 2 x 2 x 0,28 mm ² , LIYCY 3 x 0,25 mm ²
Housing:	Polycarbonate case IP66, colour grey RAL 7035
Dimension:	100 x 100 x 50 mm
Weight:	Approx. 0.3 kg