



New Generation of Satellite Time Signal Receiver

GNSS 4500 GPS/Galileo

Global Navigation Satellite System

The GNSS 4500 is a time signal receiver for synchronizing various MOBATIME products using signals from global navigation satellite systems. It can be connected to a master clock, time server or even directly to a slave clock or other electronic /IT device with a DC input requirement (current requirement (current loop, UTC or CET).

The GNSS 4500 is designed as a complete device. That means antenna and receiver module are both mounted in a common, high quality housing for outdoor installation. Power supply and time code transmission are done via a UV-protected 4-wire cable. The miniaturized concept simplifies installation and commissioning of this satellite time signal receiver.

Satellite Time Signal Receiver GNSS 4500 GPS/Galileo

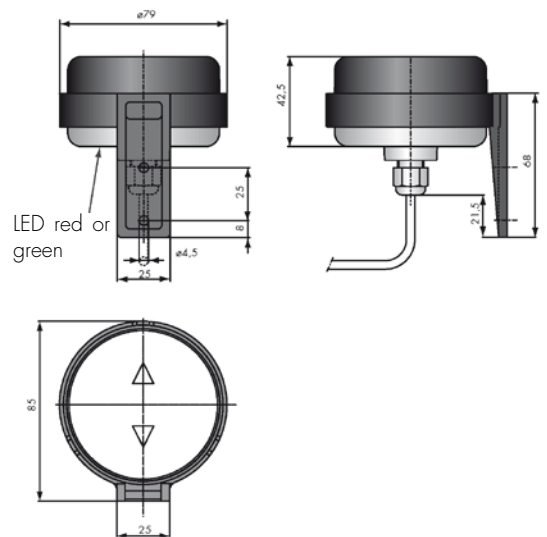
General description

The GNSS 4500 satellite time signal receiver consists of an antenna which can receive time signals from GPS and Galileo, satellites. The received time information is evaluated in the GPS receiver and can be transmitted to any master clock or time base. Consequently, all clocks and master clocks that can read the DCF (UTC or CET) code and are capable of calculating local time can be connected directly to a GNSS 4500.

Option: Surge protection box SP 4500

As an option a SP 4500 can be installed between GNSS 4500 and master clock. The master clock is thus protected against lightning strikes.

Technical Data	GNSS 4500	
	GPS	Galileo
Frequency	L1 C/A	E1 B/C
Sensitivity	-166 dBm	-159 dBm
Input voltage	12 - 36 VDC +/- 10 %	
Power consumption	< 0.4 W (< 40 mA @ 12 V)	
Operating temperature	-30 to +70°C (0 to 95% relative humidity, no condensing)	
Standards	2011/65/EU / 2014/53/EU	
Degree of protection	IP 65	
Weight	approx. 200 g	
Cable	up to 200 m, UV-protected, 4 wires, 0.25 mm ² (AWG 23)	
Isolated output	Time code (UTC oder CET, DCF kodiert)	
Satellites	72-channel satellite tracking, min. 3 satellites required	
Accuracy of leading edge	typically +/- 5 µs (measured at output GNSS 4500)	
Synchronization time	< 5 minutes	
Signal reception LED indicator	Reception/no reception (red: UTC, grün: CET)	



Product Name	cable length		utilized System	
	10 m	100 m	GPS	Galileo
GNSS 4500 GPS	B600 4500 0001-1	B600 4500 0100-1	✓	
GNSS 4500 Galileo	B600 0013 0126	B600 0013 0128		✓
Zubehör				
SP 4500 lightning protection box	B600 SP45 0000			