

MULTI GNSS RECEIVER

GNSS 4500

The GNSS 4500 is a time signal receiver used to synchronize various MOBATIME products via Global Navigation Satellite System signals. It can be connected to a master clock, time server or even directly to a slave clock or any other electronic / IT device with a DCF input (current loop, UTC or CET) requirement.

The GNSS 4500 is constructed as an all-in-one device, meaning the antenna and receiver module are both located in the high quality outdoor case. UV-protected 4 wire cable for power supply and time code transmission. The miniaturized concept simplifies the mounting and commissioning of this Satellite Time Signal Receiver.

GENERAL DESCRIPTION

The GNSS 4500 satellite time signal receiver consists of an antenna capable of receiving signals from GPS, Galileo, GLONASS and/or BeiDou satellites (depending on version, see order table). The received time information is evaluated in the GNSS receiver and sent to any master clock or time base. Consequently all clocks and master clocks accepting the DCF (UTC or CET) code, capable of calculating local time, can be connected directly to a GNSS 4500.

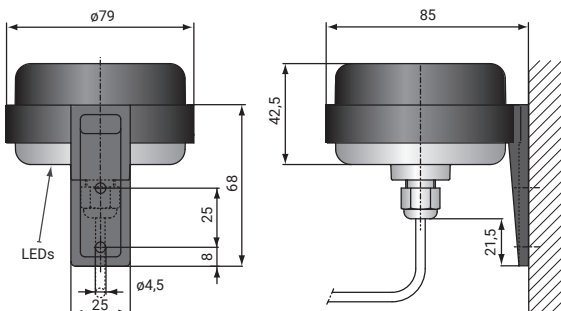
OPTION



SP 4500

Surge protection box

Mounted between GNSS 4500 and master clock. Protects the master clock against lightning.



LE-801327.01 / 2021



	GNSS 4500			
	GPS	Galileo	GLONASS	BeiDou
Frequency	L1 C/A	E1B/C	L10F	B1I
Sensitivity	-166dBm	-159dBm	-166dBm	-160dBm
Input voltage	12 – 36VDC $\pm 10\%$			
Power consumption	< 0.4W (< 40mA @ 12V)			
Operating temperature	-30 to +70°C (0 to 95% relative humidity, non-condensing)			
Standards	2011/65/EU / 2014/53/EU			
Degree of protection	IP 65			
Weight	approx. 200g			
Cable	up to 200m, UV-protected, 4 wires, 0.25 mm ² (AWG 23) longer cable possible with higher cross-section (up to 1mm ²)			
Isolated output	Time code (UTC or CET, DCF coded)			
Satellites	72 channel satellite tracking, min. 3 satellites required			
Accuracy of leading edge	typically +/- 5 μ s (measured at output GNSS 4500)			
Synchronization time	< 5 minutes			
Signal reception LED indicator	Reception/no reception (red: UTC, green: CET)			

Order information

PRODUCT NAME	CABLE LENGTH		UTILIZED SYSTEM(S)			
	10M	100M	GPS	Galileo	GLONASS	BeiDou
GNSS 4500 GPS	129768	129772	•			
GNSS 4500 GPS_Galileo	129769	129773	•	•		
GNSS 4500 GPS_Glonass	129770	129774	•		•	
GNSS 4500 GPS_Beidou	129771	129775	•			•
GNSS 4500 Galileo	130126	130128		•		

ACCESSORIES

ART. NO.	ACCESSORY
115948	SP 4500 lightning protection unit
104848	extension cable (up to 100m, length specified by customer)
104846	extension cable (100m roll)

*Do you have any questions?
We are happy to help.*

Moser-Baer AG | Spitalstrasse 7 | CH-3454 Sumiswald
Tel. +41 34 432 46 46 | Fax +41 34 432 46 99
info@mobatime.com | www.mobatime.com