

Key Features

- Receives time simultaneously from up to 12 satellites utilizing the GPS satellite system
- Provides accurate reference to within ± 100 nS of UTC
- NMEA-0183 messages on serial port output with option installed
- Provide most accurate external time source for MCR
- Includes either Standard Antenna or Basic Antenna Package
- Antenna cable lengths up to 500'/152 m available
- In-line surge arrestors and in-line GPS amplifiers available
- Compact design for portable applications
- May be added to **MCR1000**, **MCR5000** or **MCRPCIe**

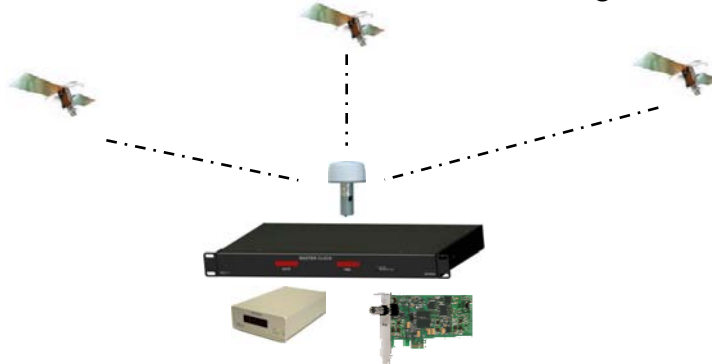
Masterclock's MCR-GPS (GPS Receiver) is an add-in module option for Master Clock Reference Devices. It provides a precision time reference based upon the Global Positioning Satellite System.

The GPS option maintains and provides an excellent atomic time reference based on reception of time from up to 12 GPS satellites simultaneously.

NMEA-0183 satellite and date/time information messages available on serial port with option installed. PPS on-time output locked to top of second.

Each MCR may be ordered with an MCR-GPS module option (MCR1000, MCR5000, and MCRPCIe).

The GPS module includes the **Standard Antenna Package**.



MCR-GPS Module

Specifications	Receiver
Satellites	12 Channel, up to 12 satellites simultaneously, parallel
Frequency	L1, 1575 MHz
Antenna Connector	SMA Female
RF Bias to Antenna	3V DC, Center Pin
PPS	4 μ s, TTL level, on-time leading edge
Accuracy	± 100 nS of UTC
	Antenna
Type	Active, External
Gain	32 dB
Mount	Outdoor, threaded pipe/mast. M24 x 1.5 internal thread. Mounting kit provided.
Operating Temperature	-40° to 85°C, (high humidity)
Voltage	3/5 VDC, center pin
Power Consumption	.24 W @ 22 mA
Polarization	Right Hand Circular
Weight	4.9 oz (140 g)
Impedance	50
Dimension	3.7" diameter x 4.9" length (96mm x 126mm)
Connector	SMA Female
Antenna Cable	50' (15m) Beldin 8219, 50 Ohm low loss with SMA male connectors