



GPS TIME SERVER DRM-1010

GPS time synchronization device is a compact DIN rail mountable unit that synchronizes and maintains the timing and frequency requirement of power and process industry equipment using a signal obtained from different external sources such as GPS and GLONASS. GPS Time synchronization unit – DRM-1010 is a cost-effective solution for time synchronization. It provides nanosecond accuracy when external time references are not available. It has a storage facility to store the system log file. It delivers NTP, SNTP, IRIG-B, PFC-Pulse, RS232 & RS485 outputs. The system allows configuration and monitoring through a Web-based application. It supports a wide range of power supply input either 90V-260V AC/DC or 18-36VDC or 36V-72VDC.

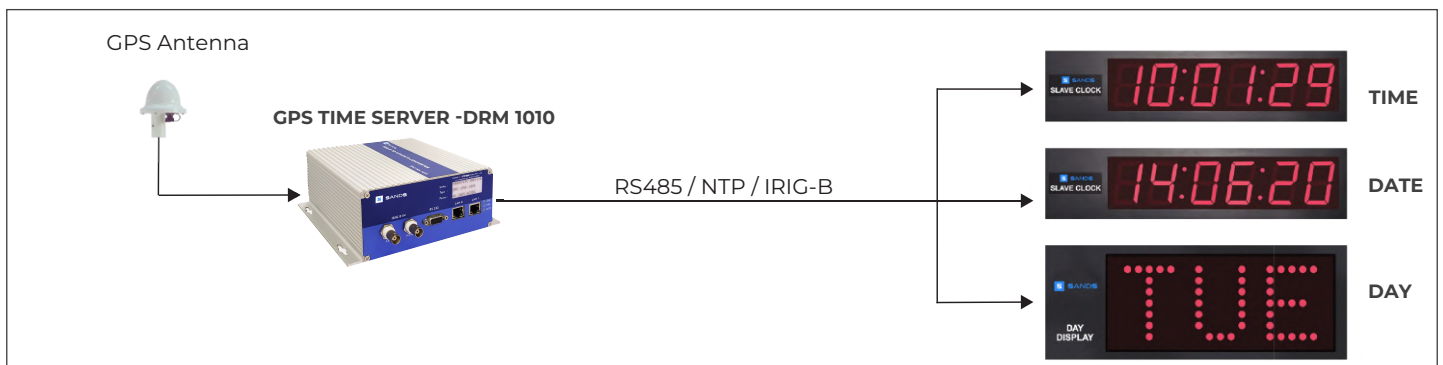
FEATURES

- ◊ Satellite Time reference for the System
- ◊ High free-running accuracy
- ◊ Compact Din Mountable System
- ◊ Field configurable pulse outputs
- ◊ 10/100MBps NTP & SNTP Ethernet time outputs
- ◊ Provides IRIG-B AM and TTL time signals
- ◊ MODBUS output over RS485/RS232
- ◊ Battery backup provided for the time update
- ◊ Adjustable Time Zone
- ◊ Events storage facility
- ◊ Isolated and protected Interfaces
- ◊ The input Power supply can be Customized
- ◊ Cable length can be supplied as per requirement
- ◊ All weatherproof Antenna

APPLICATIONS

- ◊ Event Loggers
- ◊ Disturbance Recorders
- ◊ Electronic tri-vector meters
- ◊ Phasor measurement unit
- ◊ SCADA servers
- ◊ Numeric Relays
- ◊ Slave clocks
- ◊ Servers of EMS
- ◊ Electronics Instruments
- ◊ Standalone computers

ARCHITECTURE





TECHNICAL SPECIFICATION

Power Supply	
Standard	85 to 260V AC, 1 ϕ , (47Hz to 63Hz) or 90V to 370V DC
Custom	36V to 72V DC (48V), 18V to 36V DC (24V)
Power Consumption	<10W
GPS Receiver & Antenna	
Configuration	Single Antenna
Timing Accuracy	< 25nS RMS Accuracy
Output Impedance	50 Ω
Frequency	1575.42 \pm 1.023MHz
Environmental	All weatherproof Antenna
Satellite tracking	12 Channels, C/A code
Coverage	360°Azimuth, 0°- 90°Elevation
User Interface	
Status LED	GPS, PPS, NTP & PWR
Alarm*	1xPFC for GPS Fail & Power Fail
Configuration port	10/100Mbps Ethernet
Environment	
Operating Temp	0°to 50°C
Humidity	95% Non-Condensing
Mechanical	
Enclosure	DIN Rail Mountable
Dimension	70mm(H)x190mm(W)x200mm(D) \pm 5mm
Weight	<1.5Kg
Protection Class	IP20
Event Output (Pulse Output)*	
User Configurable	
Pulse output	PFC, 250V AC/DC, 0.2A (PPS, PP5S, PPM, PPQH, PPHH, PPH, PPD)
Number of Output	2Nos Max

Connector	Pluggable Terminal Block
IRIG-B Output*	
Amplitude	
Modulation (AM)	Carrier : 1kHz Format : User Selectable Modulation Ratio : 3:1 Unloaded Voltage : 0-5V (p-p) Loaded Voltage : 0-3V (p-p) 150 ohm Accuracy : <3 us to PPS Maximum Distance : 3km
Pulse Width	
Modulation(PWM/TTL)	Logic 0 : 0V +250mV Logic 1 : 5V +250mV Format : User Selectable Accuracy : <200ns to PPS Rise Time : <15ns Maximum Distance : 50m
Number of Output	AM-1No & TTL-1No
Connector	BNC,75 Ω , Female
Ethernet Output	
Protocol	NTP & SNTP
Speed	10/100Mbps
Connector	RJ45
Distance	100m max without a switch.
Number of port	1 x 10/100Mbps Max 2 x 10/100MBps*
RS232 Output	
Output1	Modbus, NMEA, and standard formats
Distance	15m
Connector	DB9, Female
RS485 Output*	
Output1	Modbus, NMEA, and standard formats
Distance	1200m
Connector	Pluggable Terminal Block

Note: * Optional

Prices are subject to actual requirements, contact sales for pricing

Product development is continuous process - Specification subject to change

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