

# GPS SYNCHRONISATION MODULE

# **GPS SYNCHRONISATION MODULE**

#### Overview

The CAN-GT is a GPS Based Timer is designed for performing Simultaneous & Synchronized control tasks by remotely installed multiple units with timing accuracy of 0.01 sec. The CAN-GT Timers find application in Cathodic Protection (CP) stations, where it is required to briefly interrupt the Bias currents simultaneously at all the stations during measurement of the Corrosion Potential. The CAN-GT Timers ensure Timing accuracy by continuously synchronizing internal clock with GPS satellite broadcast signals, thus all the units installed in a region operate with time synchronization.

The CAN-GT Timer is an ON/OFF timer with Real Time clock, which is synchronized by GPS clock. Functions of the timer are controlled by a real time clock. i.e. user can automatically start and stop timer on any day and at any time.

It is a specially designed Timer for carrying out ON/OFF CP surveys using the current interruption technique. This Timer switches the contactor in the CP unit ON & OFF to switch the output current from the unit ON & OFF.

The Timer has a built-in real time clock with advanced microcontroller-based circuitry to provide a wide variety of programming. It has an OLED display and a 4-key keypad for ease of programming and for displaying the information about various modes & time periods.

### **Related Products**

- ✓ 4/8/16 Channel Temperature Scanner.
- ✓ Analog Signal Isolators for mV, V, mA, TC, RTD, etc.
- ✓ Programmable Loadcell Amplifier with Isolation

APPLICATIONS

- ✓ Industrial automation systems
- ✓ AC/DC Drive systems



# Features

- ✓ 2" Ultra-wide Graphic OLED Display; viewing angle > 160° and Anti-glare strain free viewing.
- ✓ Advanced Micro-controllerbased design incorporates software algorithms for signal conditioning.
- ✓Interactive User interface with Graphical Fonts and Keypad for calibration and settings.
- ✓ Lithium battery backed Real Time clock.
- ✓ Permanent NVRAM Storage for Programme.
- ✓ Facility to synchronies timer with GPS clock.
- ✓ Remote Start/stop &Reset facility.
- ✓ Energy Efficient Design reduces carbon footprint.

### ✓ Optional Features

- RS 485 MODBUS interface.
- Relay contacts for Set point control (1 nos.).

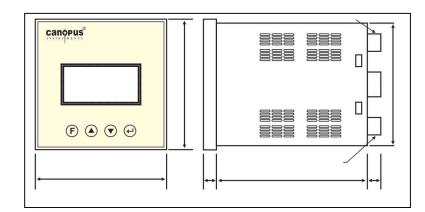
# **TECHNICAL SPECIFICATIONS:-**

Model No.	GPS SYNCHRONISATION MODULE	
Input		
User Interface	Keypad	4 Front panel keys (Function, Up, Down, Enter)
	Display	OLED with Graphic Capability
	Size	96 X 96mm – 6 X 4cm
	Colour	Yellow
	Viewing Angle	>160°
Performance	ADC Resolution	16 bits (±32000 counts max.)
	CMRR	>90dB
	Response Time	200mSec
	Accuracy	±0.1 % of FS
		±1°C Thermocouple
	Linearity	0.05%

General Specifications		
Power Supply Voltage	$\begin{array}{l} 90-270V_{AC}, 50/60_{Hz} \\ 100-250V_{DC} \end{array}$	
Power Consumption	< 5VA	
Protection	Fuse: 1A (In-Built) Slow Blow type	
Enclosure	Panel Mount; ABS plastic Size: a. 96 X 96 mm; Depth – 120 mm Panel Cutout – 92X92 mm	
Operating temp. range	$0-55^{\circ}C$	
Storage temp. range	$0-80^{\circ}\mathrm{C}$	
<b>Relative Humidity</b>	5 – 95% RH Non-Condensing	
Max. Altitude	1000 mts above MSL	

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## Mechanical Details:





#### (96X96mm)

PIN	Details	PIN	Details
1	COM (RELAY)	7	GND
2	NC (RELAY)	8	RESET (Digital Input)
3	NO (RELAY)	9	STOP (Digital Input)
4	+A (RS-485)	10	START (Digital Input)
5	-B (RS-485)	11	NC
6	SHLD (RS-485)	12	24VDC (Digital Input)

PIN	Details
Р	Phase
Ν	Neutral
E	Earth

#### **About Us**

**CANOPUS INSTRUMENTS** is engaged in the development & manufacturing of industrial automation and process control instrumentation products. The product areas cover mainly Analog Signal Conditioning Instruments for Process Automation, Embedded Systems & Ultrasonic Equipment for Non-Destructive Testing Applications.

All the CANOPUS range of products are designed and manufactured with special care, to ensure trouble free performance in Industrial applications where Electromagnetic Interference (EMI) & Harsh environmental conditions exist.

Today these products come to our customers with the quality assurance and tech-support in H/W & S/W, which has evolved with our experience of over 25 years, to ensure uninterrupted operation in field conditions. This has enabled us to successfully create an installed base of tens of thousands of units performing satisfactorily in a wide spectrum of Critical Real time Industrial applications all over India and in other parts of the world.

### **INNOVATION – QUALITY – RELIABILITY**







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