

DIGITAL GPS BASED CLEAN ROOM CLOCKS



Salient Features:

Digital GPS Based Clean Room Synchronized Clocks are especially designed for Pharmaceutical Clean Rooms to ensure uniform time across the plant, using the Master Slave Synchronization of clocks over wired RS 485 Communication.

The Master GPS Clock is customized to accept the Global Positioning Satellite Time of the country of use . It is accurate to 500 millisecs & transmits the GPS Time to Slave Clocks over RS 485 wired communication.

For India & countries where 865 MHz. is a free to air frequency, the Master GPS Clock can also be provided with a Radio Frequency (RF) Wireless Communication, which does not require communication cabling. The Master & slave clock communication then works in Wireless Mesh Network.

The Clean Room Clocks are designed for aesthetic blending into Pharma Clean Rooms with a Stainless Steel Washable Front Plate, Rated IP65. The back body of the clock is made of Mild Steel with Powder Coating. The back body goes into the Modular Clean Room Panels or brick walls.

Time is accurately maintained by inbuilt memory battery even in the case of power cuts. In the event of RS 485 or wireless RF communication failure, the clocks run on in-built high accuracy mode with annual drift of not more than +/-60 seconds.

The digital slave clocks are available in a variety of display sizes - 4"/ 2.5"/1" High Super Bright 7 Segment Display Panel with 6 displays, 2 each for Hours, Minutes & seconds. The display used is a super bright 7 segment red LED Display with exceptional depth & clarity for visibility over a long distance.



Master GPS Clock



Model AI-CL4

4" Display Slave Clock



Model AI-CL1

1" Display Slave Clock



Model AI-CL2

2.5" Display Slave Clock

Specifications :

Display Master GPS Clock (AI-GPS-M2)	6 Digits 2.5" High 7 Segment Super Bright Red LED Display for Hours , Minutes & Seconds Format HH:MM:SS
Display (AI-CL1)	4 Digits 1" High 7 Segment Super Bright Red LED Display for Hours & Minutes Format HH:MM Optional 6 Digits 1" High 7 Segment Super Bright Red LED Display for Hours , Minutes & Seconds Format HH:MM:SS
Display (AI-CL4)	6 Digits 4" High 7 Segment Super Bright Red LED Display for Hours & Minutes , Seconds in 2" high size Format HH:MM:SS
GPS Receiver Specifications of Master Clock	Antenna Type : Active Antenna Wire Length : 3 mtrs. Protocol : NMEA Standard Cold Start : 45 Seconds (Avg) Warm Start : 45 Seconds (Avg) Hot Start : 2 Seconds
Communication	Wired RS 485 Proprietary Protocol/ Optional Wireless RF Communication for Upto 108 Clocks in a single master slave network
Accuracy	Standard GPS Accuracy of +/- 1 second relayed all across the network. In absence of GPS Signal, +/-60 Seconds per year standalone accuracy
Time Programming	Wireless IR Remote for time input for slave clocks in case of Communication Failure
Standard Enclosure	Mild Steel Powder Coated with Stainless Steel Front Flush Plate for Clean Room Modular Wall Mounting
Size Display Master GPS Clock (AI-GPS-M2)	Body 350 x 105 x 40 mm. (W x H x D) Front Flush Plate 400 x 130 mm (W x H)
Model AI-CL1	Body 105 x 70 x 40 mm.(W x H x D) Front Flush Plate 150 x 90 mm ((W x H)
Model AI-CL2	Body 350 x 105 x 40 mm. (W x H x D) Front Flush Plate 400 x 130 mm (W x H)
Model AI-CL4	Body 480 x 165 x 60 mm. (W x H x D) Front Flush Plate 525 x 180 mm (W x H)
Time Display	24 Hours Time Format Standard / Optional 12 Hours Format
Input Supply	Standard 24 V.D.C. 1 Amps for 1" & 2.5" Clocks 24 V.D.C. ,1.5 Amps for 4" Clocks Optional 230 VAC , 50 Hz. Single Phase



Manufactured By :

ACE INSTRUMENTS

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