CLEAN ROOM MONITOR

AI-CRM1-LCD

The Clean Room Monitor with Graphic LCD Display is designed to measure the vital parameters of Temperature, Humidity & Differential Pressure in clean room applications. The Model AI-CRM1-LCD is designed for minimum cabling & easy flush mounting in Modular wall or brick walls of clean rooms.

The Instruments find immense use in Pharma Clean Room, Hospitals, Operation Theaters, APIs, Bulk Drugs, Electronic Hardware manufacturing plants, test plants, green houses, etc. Easy integration to building management system (BMS) with the RS 485 Modbus RTU Protocol communication allow easy set up & great control.

The display of the AI-CRM1-LCD is a 128 x 64 Graphic Blue Backlight Display with white digits & provides an easy to readout 3 Line Display with Engineering unit display for each -Temperature Readout with ^0C, Humidity readout with %R.H. & Differential Pressure readout with Pascals or mm.W.C. display. The Clean Room Monitor has an integrated buzzer alarm for process limit violation alert for all the 3 parameters of Temperature, Humidity & Differential Pressure. It has an acknowledgment key flushed to front plate for acknowledging the buzzer alarm .

The Clean Room Monitor has multi-level password protection for configuration of ranges, alarm limits & communication protocols to ensure full compliance with USFDA 21 CFR Part 11 specifications , thus lending it wide applications in Pharmaceutical, API & Bulk Drug Plants.

ACE INSTRUMENTS

SPECIFICATIONS:

Manufacturer	ACE INSTRUMENTS
Model	AI-CRM1-LCD
Measuring Range	1) 0 to +50^{0}C typical for Temperature 2) 0 to 99.9%RH typical for Relative Humidity 3) 0 to 100 pascals / -50.0 to + 50.0 mm.W.C. (Any other customized range as per user specification)
Display	Multi row Graphic LCD Display 128 X 64 Blue Backlight with White Digits Individual Parameter Engineering Unit.
Accuracy	1) ± 0.2^{0}C for 0 to 50^{0}C for Temperature 2) ± 1.8% for 10 to 95% RH for Relative Humidity 3) +/- 0.5% F.S. for Differential Pressure
Resolution	Fixed 0.1 for both Temperature & Relative Humidity, 0.1 mm.W.C. or 1 pascals for Differential Pressure
Output (Optional)	4-20mA
Supply Voltage	24V DC, 250mA
Mounting	Wall mounting / Modular Wall Mounting with Stainless Steel Front Flush Plate for Clean Rooms
Enclosure	M.S. Powder Coated Body with SS Front Flush Plate for Modular wall mounting with option of Mirror Finish/Matte Finish
Communication	RS 485 Modbus Protocol Communication for BMS/SCADA Integration (Optional @ Extra cost)
Sensor Type	1) Polymer sensing for Temperature 2) Capacitive polymer sensing for Relative humidity 3) Piezo Resistive Sensor for Differential Pressure
Buzzer	Integrated Audio buzzer Alarm in case of process violation (LO & MI for each Temperature & Humidity)
Dimensions	M.S. Powder Coated Back Box 140 (W)×155 (H)×35(D) mm. Front Stainless Steel Flush Plate 180 (W) x 200 (H) mm.
Weight	975 gms. Approx
Calibration	Will provided at no extra cost traceable to National/International Standards Valid for 1 year
Warranty	12 Months Manufacturer warranty