The Clean Room monitor

HUMIDITY TEMPERATURE DIFF. PRESSURE

AI-CRM1E-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-CRM1E-LCD is designed for minimum cabling & easy flush mounting in Modular wall or brick walls of clean rooms. The sensor for humidity & temperature is externally provided so that the sensor can be mounted inside the clean room & the display can be outside the clean room under observation.The differential pressure sensor is built inside the clean room monitor with 2 Nos. hose nipple connections for room & corridor connection.

The instruments find immense use in Pharma Clean Room, Hospitals, Operation Theatres, 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-CRM1E-LCD is a 128x64 Graphic Blue Backlight Display with white digits & provides an easy to readout 3 Line Display with Engineering unit display for each - Temperature Readout with ^{0}C, 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 .

Specifications

Sensor Type	1) Combined external humidity & temperature sensor 2) Built in digital sensor for differential pressure
Range	1) 0 to +50.0 Deg.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)
Resolution	Fixed 0.1 for both temperature & relative humidity, 0.1 mm.W.C. or 1 pascals for differential pressure
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
Display	Multirow Graphic LCD Display 128 X 64 Blue Backlight with White Digits Individual Parameter Engineering Unit
Differential pressure entry	2 Nos. 4 mm. Hose nipples at top of clean room monitor back enclosure
Setting	By 4 keys inside the front stainless steel panel
Buzzer	Buzzer Indication alarm for each Parameter for Low & high process violation alert for each of the 3 parameters, individually programmable for each temperature, humidity & differential pressure
Supply Voltage	24VDC, 500mA
Mounting	Wall mounting / Modular Wall mounting with stainless steel front flush plate for clean rooms
Sensors	External humidity & temperature sensor in stainless steel front flush plate enclosure. Built-in differential pressure sensor with brass hose nipples (chrome plated) for differential pressure at rear (4mm X 2 Nos.)
Communication	RS 485 Modbus RTU protocol
Dimension	Enclosure :200 (W) x180 (H) x 35 (D)mm
Enclosure	M.S. Powder coated body with stainless steel front plate for Modular wall mounting/ optional brick wall mounting . Please select from Mirror Finish/ matte finish front stainless steel plate
Weight	700 gms. Approx.