HCR3C SERIES
CLEANROOM MONITOR

SYSTEM OVERVIEW

The HCR3C Series of Cleanroom Monitor was developed specifically to allow for monitoring of confined spaces with accuracy and reliability. The HCR3C allows for either in-room or remote monitoring and accepts analog inputs from remote sensors for display to suit a variety of installation needs. It features a flush fitting stainless-steel front plate that enables the user to wipe-down the unit when necessary.

APPLICATIONS

The HCR3C Cleanroom Monitor is designed for use with electronic controllers in domestic or commercial heating and cooling systems.

Honeywell

Analog Inputs for Remote Sensors

Sensor Type:	4–20 mA / 0–5 Vdc /0–10 Vdc selectable
Number of Inputs:	3 (Temp, RH, DP)
Input Impedance	250Ω for 4–20 mA, 10KΩ for voltage
Input Ranges:	0-35 / 0-50°C, 0-100 %RH, ±250 Pa / ±500 Pa
Transmitter Power Output:	20 Vdc nominal, 100 mA max

Indication

Temperature Display	3 digit LED as 0.0 - 50.0°C or 32.0 - 122°F (°C / °F by LED)
Relative Humidity Display	3 digit LED as 0.0 - 99.9 %RH
Differential Pressure Display:	3 1/2 digit LED display as -500 - 500 Pa or -50.0 - 50.0 mmWC (Pa / mmWC is indicated by an LED)
Digit Type:	7 segment red LED, 0.80" (20.32 mm) high
Alarm Indication:	Low / High alarm red LED for each parameter (T+RH+DP)

User Input

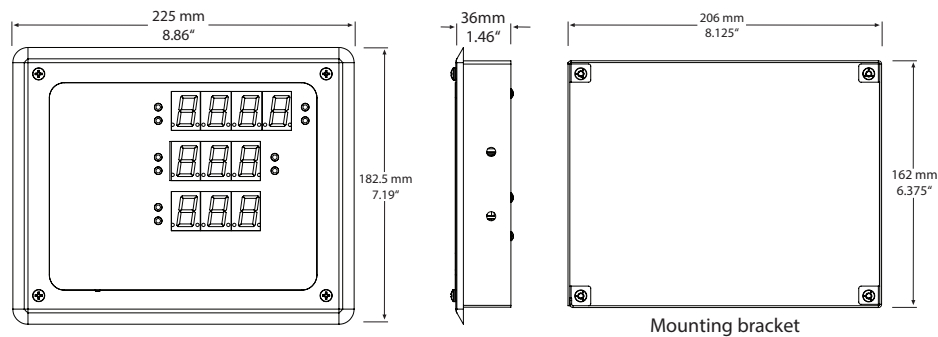|	
Programming:	Menu / Up / Down front panel tactile keys
Alarm Silence:	Silence front panel tactile key

Analog Outputs

Number of Outputs:	3 (Temp, RH, DP)
Signal Type:	4–20 mA (sourcing) and 0-5 Vdc / 0-10 Vdc selectable
Output Drive:.	**Current:** 500Ω max **Voltage:** 10 KΩ min
Output Scales:	0 - 50°C, 0 - 100 %RH, ±500 Pa

Alarm Outputs

Number of Outputs:	3 (Temp, RH, DP), can assign condition as low/high/both
Output Type:	NO optically isolated solid state FET switch
Contact Rating: .	100 mA at 28 Vac / 40 Vdc maximum
Trip Point:	Upper and Lower alarms adjustable
Operation	Self-resetting, can be silenced via silence button or disabled remotely via BACnet® or Modbus
Alarm Delay:	0 to 255 seconds (programmable)
Alarm Buzzer	Internal, operates on any alarm condition
Buzzer Delay	0 - 255 seconds (programmable)
Operation	Self-resetting, can be silenced via silence button or disabled remotely via BACnet® or Modbus

General

Operating Conditions	0 - 50°C (32 - 122°F), 0 - 90 %RH non-condensing
Storage Temperature	-20 - 60°C (-4 - 140°F)
Power Consumption	Pluggable screw terminal block(14 to 22 AWG)
Pressure Connections	Port for 1/8" ID tubing
Protection	IP65 Front plate
Weight	1.3 kg
Certification:	CE, RoHS
Country of Origin:	Canada
Enclosure	Wall mount enclosure, SS304, suitable for wipe-down 225mm W x 182.5mm H x 36mm D (8.86" x 7.19" x 1.46")

Mounting bracket

ORDERING

MODEL	Product Description
HCR3	S/S Cleanroom Sensor - Temp, Humidity & Low Pressure

CODE	LCD Display
C	Remote Sensor Analog Inputs (Sensors Not Included)

CODE	Pressure Range
01	±250 Pa or ±25 mmWC
02	±500 Pa or ±50 mmWC

CODE	Output
ANA	Analog (3x)
BAC	BACnet® Communications
MOD	Modbus Communications

HCR3	C	01	ANA

HCR3C SERIES
CLEANROOM MONITOR

Honeywell