

INCA-100

CO2 / Temperature / Humidity Sensor



- Lonmark certified air quality sensor which detects carbon dioxide (CO₂), temperature and humidity.
- Home, industrial and HVAC applications
- Power supply range: 12 – 24 AC/DC
- Generic purpose Output relay.
- Long life self-calibrated non disperse infrared sensor (> 15 years).

- LonMark functional profiles:
 - 0 Nodeobject
 - 1040 hvacTempSensor
 - 1050 hvacRelativeHumi
 - 1070 co2Sensor
 - 3040 lampActuator
- Neuron FT5000 @ 20Mhz
- Firmware FIN2100L01001
- Program ID 80:00:E1:0A:00:06:04:01



TECHNICAL DATA

ELECTRICAL

Power Supply	12-24 AC/DC
Frequency (AC Supply source)	50-60 Hz
Overvoltage	Transil diode
Overload	PTC
Power consumption	< 600 mW

SENSORS

Parameter	Measurement Range	Resolution	Accuracy
Temperature	-20°C..70°C	0.1 °C	± 0.5°C
			± 2°C
Humidity	0..95% RH (Without condensation)	1 % RH	± 3% RH (10..90 %RH)
			± 7% RH (0..10 %RH y 90..99%RH)
CO2 Sensor	0..5000 ppm		± 30 ppm, 3%
			± 20 ppm, 1%
			< 1 minute

COMMUNICATIONS

Type	LonWorks (ISO/IEC 14908-2)
Transceiver	FTT-10 (78 Kbps)

OUTPUT

Relay	1 X 3A-250 VAC / 3A – 30 VDC Cosφ = 1
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PACKAGE

Mounting	Wall mounting
Dimensions (millimeters)	80 x 80 x 25
Colour and material	White, ABS UL94-V0
IP	IP20

OPERATING CONDITIONS

Operating temperature	-20°C..70°C
CO2 Sensor operating temperature	0°C..50°C
Life	> 15 years
Storage temperature	-30°C..70°C

TECHNICAL INFORMATION

INCA-100 is a wall mounting device suitable for home, industrial, indoor air systems, ventilation and hvac applications. It is a LonMark certified device according to the Interoperability Guidelines Version 3.4, with Lonmark profiles #0 (NodeObject), #1040 (hvacTempSensor), #1050 (hvacRelativeHumi), #1070 (co2Sensor) and #3040 (lampActuator)

The INCA-100 device is maintenance – free in normal environments thanks to the built-in self correcting automatic correction algorithm. This algorithm constantly keeps track of the sensor's lowest reading over a 7.5 day interval and slowly corrects for any long-term drift detected as compared to the expected fresh air value of 400 ppm CO₂. The tuning speed is limited to about 300 ppm/week.

ORDERING INFORMATION

INCA-100H

