H-Guard-L ™

CO2 Transmitter

The H-Guard-L is a CO2 transmitter series designed to be installed in HVAC applications. The CO_2 sensing element uses the Non-Dispersive Infrared Technology (NDIR) with the patented self-calibration system to guarantee the long term stability and up to 15 years life time. H-Guard-L duct probe transmitter offers temperature and humidity option. The high accuracy temperature and humidity combined sensor provide a digital interface and outstanding full range linearity. The one or three analogue 0-10V or 4~20mA outputs are selectable by jumpers. Modbus RS485 communication interface is provided. Optional backlit LCD can display all measurements and is usable easily in more applications. H-Guard-L offers simplicity in design and installation with the special demountable and replaceable filter to avoid pollution and influence of measurement.

Key Features:

- Special used to real-time detect CO2 level in air ducts.

- NDIR infrared CO2 sensor inside with Self-Calibration and up to 15 years lifetime

- Humidity and temperature detection optional

- Combined temperature and humidity sensor provide the highest accuracy in full range

- Backlit LCD display option can display CO2 measurement and temperature+ RH measurements

- Providing one or three 0~10VDC or 4~20mA or 0~5VDC analogue outputs

- Modbus RS485 communication interface makes usage and test more convenient

- Smart structure and attractive housing provide you a unique operation feeling

- Simple and skillful design and installation with a demountable and replaceable filter to provides dust-proof protection

- Special a 180° rotatable fastness position for the probe can change the direction of air detection.

- All housing and probe are IP54 class

- CE-Approval

Typical Applications:

Building management for office areas and residental

Ventilation control system

GASTECH
AUSTRALIA

H-Guard-L™

Sensor & Transmitter Specifications

Gas detected	Carbon Dioxide (CO2) Temperature* Relitive Humidity*
Sensing element	Non-Dispersive Infrared Detector (NDIR)
	Temp: Band-Gap-Sensor
	Humidity: Capacitive humidity sensor
Accuracy@25(77),2000ppm	±40ppm + 3% reading
Stability	<2% of FS over life of sensor (15 yr typical)
Calibration interval	ABC Logic Self Calibration System
Response time	<2 minutes for 90% step change
Warm up time	2 hours (first time) 2 minutes (operation)
CO2 measuring range	0-2,000ppm / 0-5,000ppm selectable in orders
	0-20,000ppm / 0-50,000ppm just for TSM-CO2-S series
Sensor life	Up to 15 years
Power supply	24VAC/24VDC
Consumption	1.8 W max. ; 1.0 W avg.
Analog outputs	0~10VAC or 4~20mA selectable by jumpers
Modbus interface	Modbus RS485 interface
	9600/14400/19200(default)/28800 or 38400bps (programmable selection), 15KV antistatic protection.
Operation conditions	0~50(32~122); 0~95%RH, non condensing
Storage conditions	-40~70(-40~158)
Net weight	320g
Dimension	123.5mm x 169mm x 50mm
Approval	CE-Approval
*	options

Ordering information

65-9082   H-Guard-L CO2 transmitter wall mounting with the adown external sensor probe. 1x4-20mA output for CO2. Modbus interface. LCD display, CO2 range: 0-2000ppm, power supply 24VAC/VDC.

65-9082-10   H-Guard-L CO2 transmitter wall mounting with the adown external sensor probe. 3x4-20mA output for CO2+T+H. Modbus interface. LCD display, CO2 range: 0-2000ppm, power supply 24VAC/VDC.

49-9998-01   Plug pack 240VAC/24Vdc 450mA