H-GUARD

CO² Transmitter

The H-Guard is a CO² transmitter series designed to be installed in HVAC applications. The CO² 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.

TYPICAL APPLICATIONS

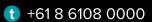- Building management for office areas and residential.

- Ventilation control system

KEY FEATURES

- Real-time detecting CO² level.
- NDIR infrared CO² module inside with four CO² detection range selectable.
- CO² sensor has Self-Calibration Algorithm and 15 years lifetime
- Wall-mounting
- Providing one analog output with voltage or current selectable
- 0~10VDC/4~20mA selectable easily via jumpers
- Provide a special model with a on/off relay output with a touch button to operate a fan control.
- Design for HVAC, ventilation systems, offices, or other public places.
- Modbus RS485 communication interface optional: 15KV antistatic protection, independent address setting
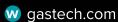- CE-Approval

H-GUARD

SPECIFICATIONS
Specifications subject to change without notice

Gas detected	Carbon Dioxide (CO_2)
Sensing element	Non-Dispersive Infrared Detector (NDIR)
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)
CO_2 measuring range	0-2,000ppm / 0-5,000ppm selectable in orders 0-20,000ppm / 0-50,000ppm just for TSM-CO_2-S series
Sensor life	Up to 15 years
Power supply	24VAC/24VDC
Consumption	1.5 W max. ; 0.8 W avg.
Analog outputs	0~10VAC or 4~20mA selectable by jumpers
Relay output	1X3A switch load Four set points 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	180g
Dimension	100mm×80mm×28mm
Installation standard	65mm×65mm or 2"×4"wire box
Approval	CE-Approval
Ordering information	65-9080 H-Guard CO2 Transmitter, 1x4-20mA output 1 x