





NETWORK HORTICULTURE SENSOR

GH Series

The horticulture sensor series uses a highly accurate and reliable dual-channel, non-dispersive infrared (NDIR) sensor to monitor CO2, a precision thermistor to monitor temperature and a thermoset polymer based capacitance sensor to measure humidity levels.

Features include a LCD for configuration and monitoring, various output signal types, optional relays for alarm indication and field replaceable sensors.

PRODUCT HIGHLIGHTS

* Temperature, Humidity, Carbon Dioxide
* Replaceable sensor pods
* Weatherproof enclosure
* Network communication







SPECIFICATIONS

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| DESCRIPTION | ENGINEERING SPEC |
| POWER SUPPLY | 24 Vac/dc ±20% (non-isolated half-wave rectified) |
| CONSUMPTION | 75 mA max @ 24 Vdc, 125 mA max @ 24 Vac |
| PROTECTION CIRCUITRY | Reverse voltage protected, overvoltage protected |
| OPERATING CONDITIONS | -10 to 50°C (14 to 122°F), 5 to 95 %RH non-condensing |
| STORAGE CONDITIONS | -30 to 60°C (-22 to 140°F) |
| LCD SIZE | 35mm W x 15mm H (1.4” x 0.6”) alpha-numeric 2 line x 8 characters |
| LCD BACKLIGHT | Enable or disable via menu |
| NETWORK INTERFACE | MS/TP, 2-wire, RS-485 |
| BAUD RATE | 9600, 19200, 38400, 57600, 76800, or 15200 |
| ADDRESS RANGE | BACnet®: 0 to 127  Modbus: 1 to 255 |
| WIRING CONNECTIONS | Screw terminal block (14 to 22 AWG) |
| ENCLOSURE | 130mm W x 130mm H x 75mm D (5.12” x 5.12” x 2.95”)  IP65 (NEMA 4X) |
| TEMPERATURE SIGNAL | Sensor: 10K thermistor Accuracy: ±0.2°C (±0.4°F)  Range: 0 to 50°C (32 to 122°F) |
| RH SIGNAL | Sensor: Thermoset polymer based capacitive Accuracy: ±2 %RH  Range: 0-100 %RH  Hysteresis: ±1.5 %RH  Response Time: 15 seconds typical  Stability: ±1 %RH typical @ 50 %RH in 5 years |
| CO2 SIGNAL (OPTIONAL) | Measurement Type: Dual wavelength, non-dispersive infrared (NDIR), diffusion sampling Measurement Range: 0 to 5000 ppm  Standard Accuracy: ±50 ppm +3% of reading Pressure Dependence: <1% of reading / kPa Response Time: 2 minutes (T90)  Sensor Life Span: >10 years |
| RELAY OUTPUTS (OPTIONAL) | Contact Ratings: Form C (NO + NC), 2A @ 140 Vac, 2A @ 30 Vdc Relay Setpoint + Hysteresis: Programmable via menu or network  Relay Time Delay: Programmable via menu or network |
| COUNTRY OF ORIGIN | Canada |