NES Series 300 Carbon Monoxide (CO) Transmitter

DESCRIPTION

The NES Series 300 Carbon Monoxide (CO) Transmitter monitors gas concentrations from gas-powered vehicles in underground parking garages and loading docks. With Dwyer Instruments® technology built in, the NES Series 300 is compatible with either BACnet or MODBUS® communication protocol via RS-485 wire, allowing the transmitters to be used with almost any building management controller.

To maximize the accuracy of the transmitters, the sensors can be field-calibrated using the A-449 remote LCD display (see below). When the sensor reaches the end of its life, the display will indicate that the sensor needs to be replaced.

APPLICATION

To sense carbon monoxide (CO) in a wide variety of commercial and industrial applications, such as vehicle exhaust in parking structures, engine repair shops, tunnels, equipment rooms and ventilation systems, etc., and to transmit to the NES central controller.

FEATURES

- Industrial grade electrochemical sensor means longer sensor life and less frequent sensor replacements.
- Field replaceable sensors extend transmitter's working life.
- Remote LCD display makes select models more cost effective by only needing one display for multiple transmitters.
- BACnet or MODBUS® communication protocol on GSTC allow for gas sensing solutions to be used with almost any building management controller.

SPECIFICATIONS (Wall Mounted)

Sensor	Field replaceable electrochemical, 4 years typical lifespan.
Range	NO_2: 10 PPM; GSTA CO: Switch selectable 200 or 500 PPM; GSTC CO: 500 PPM.
Output Drift	<5% per year in air.
Coverage Area	5000 to 7500 ft^2 typical.
Accuracy	CO: 2% FS; NO_2: 3% FS, at the time of calibration.
Resolution	CO: 1 PPM; NO_2: 0.1 PPM.
Temperature Limits	-4 to 122°F (-20 to 50°C).
Storage Temperature	For best sensor life 32 to 68°F (0 to 20°C).
Humidity Limits	15 to 90% RH constant; 0 to 99% RH intermittent.
Response Time	<45 seconds to 90% CO; <25 seconds to 90% NO_2.
Span and Zero Adjustments	Via pushbutton, using optional A-449 display.
Housing	UV resistant glass filled polycarbonate
Output	GSTA: Switch selectable 4 to 20 mA, 0 to 5 V or 0 to 10 V; GSTC: BACnet MS/TP or MODBUS® RTU (switch selectable) communication protocol.
Power Supply	GSTA: Current Output: 10 to 35 VDC, Voltage Output: 15 to 35 VDC or 15 to 29 VAC; GSTC: 10 to 36 VDC or isolated 21.6 to 33 VAC.
Electrical Connection	Removable terminal block, knock outs for conduit fitting.
Calibration	Via pushbuttons using A-449 display. Span gas concentration is field selectable on CO units.
Weight	1 lb (0.45 kg).
Agency Approvals	CE.

NES Series 300 CO

HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code

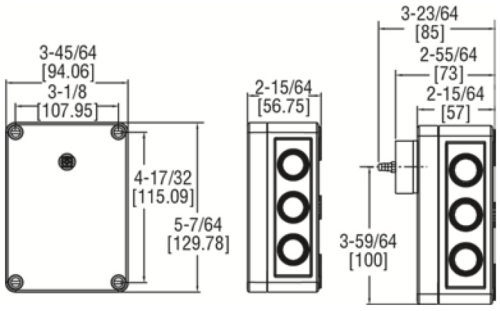
GSTA **-N** **-LCD**

SERIES
GSTA - Field selectable analog outputs
GSTC - Field selectable BACnet or MODBUS® communication protocol

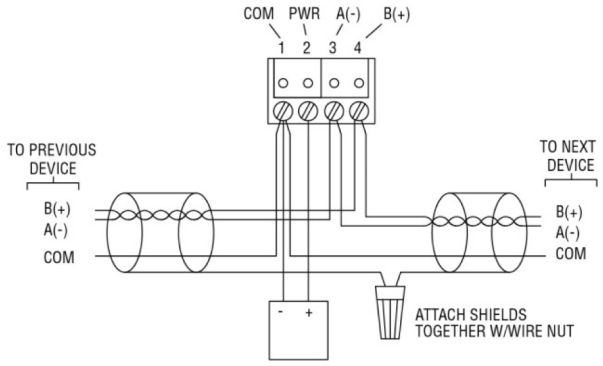
GAS SENSED
-C - CO, carbon monoxide
-N - NO_2, nitrogen dioxide

OPTIONS
BLANK - Wall mount without options
-D - Duct mount
-LCD - Wall mount with integral LCD

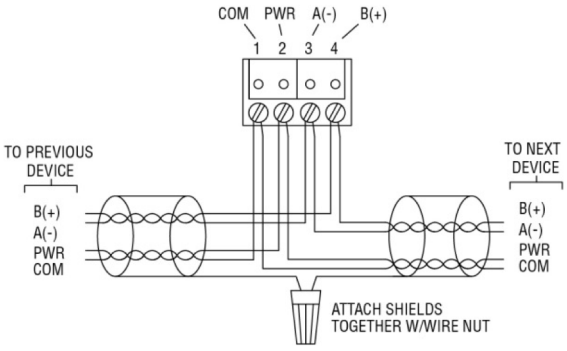
DIMENSIONS



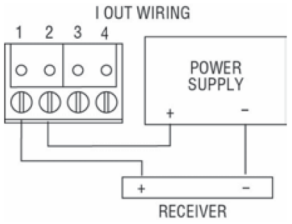
WIRING DIAGRAMS



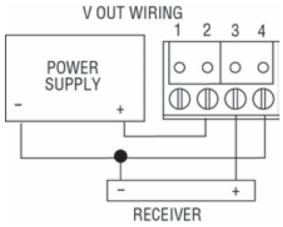
GSTC Local Power Supply



GSTC Common Power Supply



GSTA Current Output



GSTA Voltage Output

ACCESSORIES

Remote LCD Display

CO Replacement Sensor

NO2 Replacement Sensor

Calibration Adapter

A-449 – Remote LCD Display
A-505 – CO replacement sensor
A-506 – NO_2 replacement sensor
A-507 – Calibration adapter

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