

GAS & SPECIALTY SENSORS

GAS DETECTION EXPANSION MODULE 301EM



Honeywell Analytics
experts in gas detection



DESCRIPTION

The **Honeywell Analytics 301EM Expansion Module** allows the monitoring of toxic and combustible gases and refrigerants. Up to four sensors can be placed 500' away for toxic and combustible gases, and 200' away for refrigerant gas monitoring. The transmitter is equipped with a backlit LCD display and keypad that can be placed in a safe area, remote from the sensors. Alarm relays and Modbus communication are standard. The unit is compatible with the **301C** controller.

FEATURES

- Sense one to twenty zones
- Sensors available for toxic and combustible gases and refrigerants
- RS-485 Modbus communication
- Contact input for manual break-glass switches
- Three 24VDC outputs to activate strobes and horns
- 4-20mA output for each sensor
- Four relay outputs
- Easy-to-read LCD display
- Explosionproof sensors for combustible and toxic gases
- Additional gases available
- Programmable relay differential



301EM-RFSA-US3



S301D2CO

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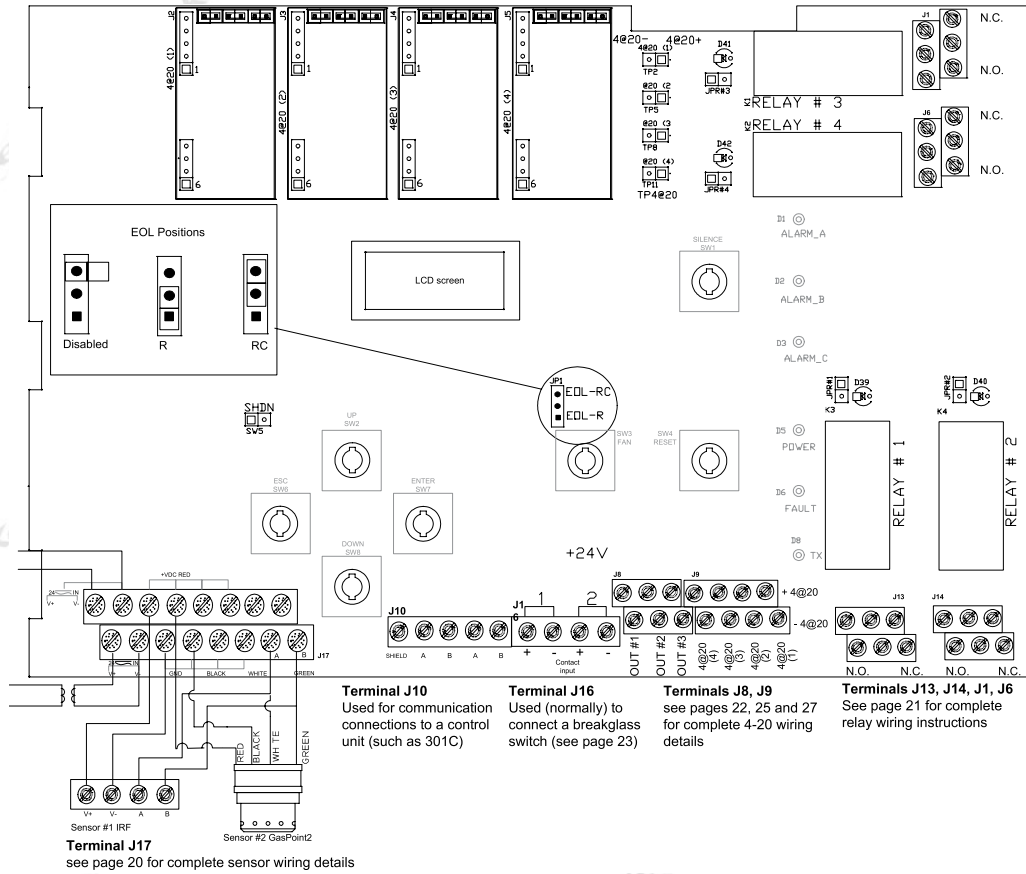
GAS & SPECIALTY SENSORS

SPECIFICATIONS	
Supply Voltage	22-27 VAC @ 48 VA, 50/60 Hz or 22-38 VDC @ 2 A max.
Accuracy	±40 ppm @ 500 ppm
Signal Output	4-20mA, 1000Ω @ 24 vdc each sensor
Communication	RS-485, Modbus
Measurement Range	
CO	0-250 ppm
NO2	0-10 ppm
Refrigerants	0-1000 ppm
Sensing Technology	
CO	Electrochemical
Refrigerants	Dual Infrared Sensor
Distance To Transmitters	Up to 500 feet (160 m), 200 ft (60.9m) maximum
Calibration Interval	6 months
Visual Indication	Green - Normal Red - Alarms A, B, & C Yellow - Fault/Service Alarm Amber - Tx (network mode)
Display	Backlit LCD
Response Time	60 seconds
Relay Output	4 DPDT relays (20 ppm diff) (4) 5A, 30 VDC or 250 VAC (resistive)
Alarm Auditory Levels [Db]	65 dBA @ 3 ft (1m) internal
Gases Detected	CO, NO2, R11, R12, R123, R125, R134A, R22
Operating Temperature	
301RF, EM	32° to 100°F (0 to 40°C)
S301	-40° to 104°F (-40 to 40°C)
Operating Humidity	0% to 95% RH (noncondensing)
Enclosure Rating	NEMA 1
Dimensions	
301EM (controller)	7.99"H x 11.02"W x 2.76"D (20.3 x 28 x 7 cm)
301RF (sensor)	4.02"H x 11.02"W x 2.48"D (10.2 x 28 x 6.3 cm)
S301(sensor)	3"H x 2" Diameter (7.6 x 5.1 cm)
Weight	
301EM	3.1 lb (1.4 Kg)
301RF	2.3 lb (1.0 Kg)
S301	2.0 lb (0.9 Kg)
Approvals	CSA
Warranty	1 year

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GAS DETECTION EXPANSION MODULE 301EM

WIRING



ORDERING INFORMATION

MODEL
301EM-US3
301EM-RFSA-US3
S301D2CO
S301D2NO2
301-IRFSR11
301-IRFSR123
301-IRFSR125
301-IRFSR134A
301-IRFSR22

DESCRIPTION
 Gas detection expansion module
 Wall mounted gas controller/expansion module with built in red strobe, light, and horn
 Remote Carbon Monoxide gas sensor
 Remote Nitrogen Dioxide gas sensor
 Remote R11 refrigerant sensor
 Remote R123 refrigerant sensor
 Remote R125 refrigerant sensor
 Remote R134A refrigerant sensor
 Remote R22 refrigerant sensor

691-K1A
Calibration Gases
DCP-1.5-W
DCPA-1.2
NIOSHSCBA
SCBA-WALCASE
UCK-1
UCK-2
UCK-3

ACCESSORIES
 Control transformer, 120:24 VAC, 100 VA
 CO, CO2, NO2, O2, CH4, NH3, N2, H2S, H2, and Refrigerants (See calibration page)
 Power supply, 24 VAC IN to 24 VDC OUT
 Power supply, 120 VAC IN to 24 VAC/24 VDC OUT (add to 9 VDC)
 Self-contained breathing apparatus kit
 Plastic wall case for single unit NIOSHSCBA
 Universal calibration kit for non-corrosive gases (N2, CO2, CH4, H2, O2, CO, and refrigerants)
 Universal calibration kit for corrosive gases (NO2, H2S, SO2, and NH3)
 Universal calibration kit for non-corrosive or corrosive gases