

# Dräger Regard 3900



ST-478-2004

The Dräger Regard 3900 is a standalone, self contained control system for the detection of Toxic, Oxygen and Ex hazards. The control system is fully configurable between 1 and 16 channels, depending upon the type and quantity of input/output boards installed. Transmitter input boards for 4 to 20 mA signals can be mixed with relay output boards in the same control system. The robust IP 65 housing allows the control system to be installed in almost any location, excluding hazardous, classified areas<sup>1</sup>. Developed with an innovative modular design means that the entire system is suitable for the most stringent of budgets. At anytime, the control system can be up-graded to meet with plant extensions and changes.



ST-272-2004

**Dräger Regard 3900:**  
Standalone, self contained control system for up to 16 channels.

### Analog input board

Each analog input board caters for one to four, 2- or 3-wire 4 to 20 mA transmitters. Each transmitter connects to dedicated field terminals. Up to a total of four analogue input boards can be installed in to a single Dräger Regard 3900, thus giving a maximum input count of sixteen transmitters. Each individual input board is populated with three relays. These relays offer common Fault, Alarm 1 and Alarm 2 SPCO outputs. The two alarm levels are fully configurable and be set as rising or falling, latching or non-latching. To differentiate between each input board a simple mechanical link is required.

### Relay output board

Each relay output board is populated with eight additional SPCO relays. Relay 1 on each relay board is a dedicated Fault relay and cannot be reconfigured. The remaining seven relays can be configured as Single, Common, Voting, Inhibit or Non-operational. An additional Alarm 3 level is offered by the relay board along with a second Fault threshold. All configurable relays can be

Rising/Falling, Latching/Non Latching and Energised normally/Energised on alarm. Alarm relays are acknowledged via the push button located on the front panel of the instrument housing. A maximum of two relay boards can be installed in a single Dräger Regard 3900 control system.<sup>2</sup>

### System Configuration

The Dräger Regard 3900 is fully configurable via a Laptop PC. The configuration software, Config 3900 allows quick and easy set-up. For new installations the configuration can be performed off-line and then uploaded during commissioning. Or during a Service routine, the system configuration can be downloaded from the Dräger Regard 3900 to the PC for verification. All calibration routines, zero and span are performed using the Config 3900 configuration software. A simple dongle cable is required to connect the PC to the Dräger Regard 3900 control unit.

<sup>1</sup> An area where there is a risk of explosion

<sup>2</sup> The total number of any type board must not exceed four

TECHNICAL DATA

Type	Control unit for location in a non-hazardous area	
Gas and ranges	Toxic, oxygen and combustible gases with user definable measuring ranges	
	Refer to transmitter type for ranges, name and engineering units	
Inputs	All configurations by Laptop computer	
	2- / 3-wire 4 to 20 mA transmitters	
	Remote reset 24 VDC supply	
Outputs	Alarm 1, Alarm 2 and Fault as standard	
	Warning and Inhibit relays on optional relay board	
	Single, common or voted alarms on optional relay board	
	Acknowledgeable relays on optional relay board	
Display	4 line, 40 character back-lit LCD	
	Active, Fault, Alarm 1 and Alarm 2 LED's per input	
	DC and AC power LED's	
	Inhibit LED	
Power supply	External	24 VDC, or
	Internal	2.5 A, 5 A or 10 A power supply @ 110/240 VAC
Dimensions (approx.)	420 x 300 x 190 mm / 16.5" x 11.8" x 7.5" (W x H x D)	
Weight (approx.)	3 kg / 6.6 lbs, depending upon installed power supply	
Ambient conditions	Temperature	0 to 55 °C / 32 to 130 °F
	Pressure	700 to 1300 hPa / 20.6 to 38.3 inch Hg
	Humidity	0 to 100 %RH, non condensing
Ingress Protection	IP 65, ABS – OV material of construction	
Approvals	ATEX	Performance approval, pending
	CSA	Pending
	UL	Pending
	CE-mark	Electromagnetic compatibility (directive 89/336/EEC) Low voltage directive (72/23/EEC, 93/68/EEC)

ORDER INFORMATION

Dräger Regard 3900 Basic Unit	42 08 780
Dräger Regard 3900 4-20 Module	42 08 782
Dräger Regard 3900 Relay Module	42 08 784
Dräger Regard 3900 RS232 Interface	42 08 785



**ETA Associates**

119 Foster Street, Bldg #6 • Peabody, MA 01960

Tel: (978) 532-1330 • Fax: (978) 532 7325 • [www.ETAassociates.com](http://www.ETAassociates.com) • [eta@ETAassociates.com](mailto:eta@ETAassociates.com)