ASHE CONTROLS PVT LTD
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EGM

Excalibur Gas Monitoring Unit



Overview

The Excalibur Gas Monitoring Unit is a powerful, scalable, and user-friendly multi-channel controller designed for continuous and reliable gas detection in demanding industrial environments. It can monitor up to 16 remotely mounted gas sensors and may be operated as a standalone safety system or easily integrated with PLC and DCS platforms through an Rs485 communication interface using the Modbus RTU protocol. Integrated audio and visual alarms provide immediate alerts whenever configured safety thresholds are exceeded.

The unit features a large 7-inch full-color graphical display that clearly presents essential information for each monitored channel, including gas type, concentration level, units, and alarm status. The intuitive interface allows fast and simple configuration of gas names, units, locations, measurement ranges, alarm setpoints, alarm types, and delays. Advanced functions such as sensor calibration, analog retransmission setup, relay management, channel enabling or skipping, password protection, data logging, and built-in self-diagnostics are all accessible directly from the front panel, reducing commissioning time and simplifying ongoing maintenance.

For improved visibility, the display presents eight channels per page, with a dedicated page mode that provides complete details for any selected channel. In addition, each channel is equipped with an 8-segment multi-color LED bar-graph display, offering an immediate visual indication of gas concentration trends in real time.

The Excalibur Gas Monitoring Unit delivers comprehensive alarm and control capability with up to 32 fully programmable relay outputs and 3 common fault relays. It supports two independent alarm levels per channel along with a dedicated fault output for sensor fault or inhibit conditions. Each channel also provides analog retransmission for seamless integration with external control and monitoring systems. All channel data is continuously available via the RS485 Modbus RTU interface.

The product is supported by a full two-year warranty covering manufacturing and workmanship defects under normal operating conditions.

Specifications

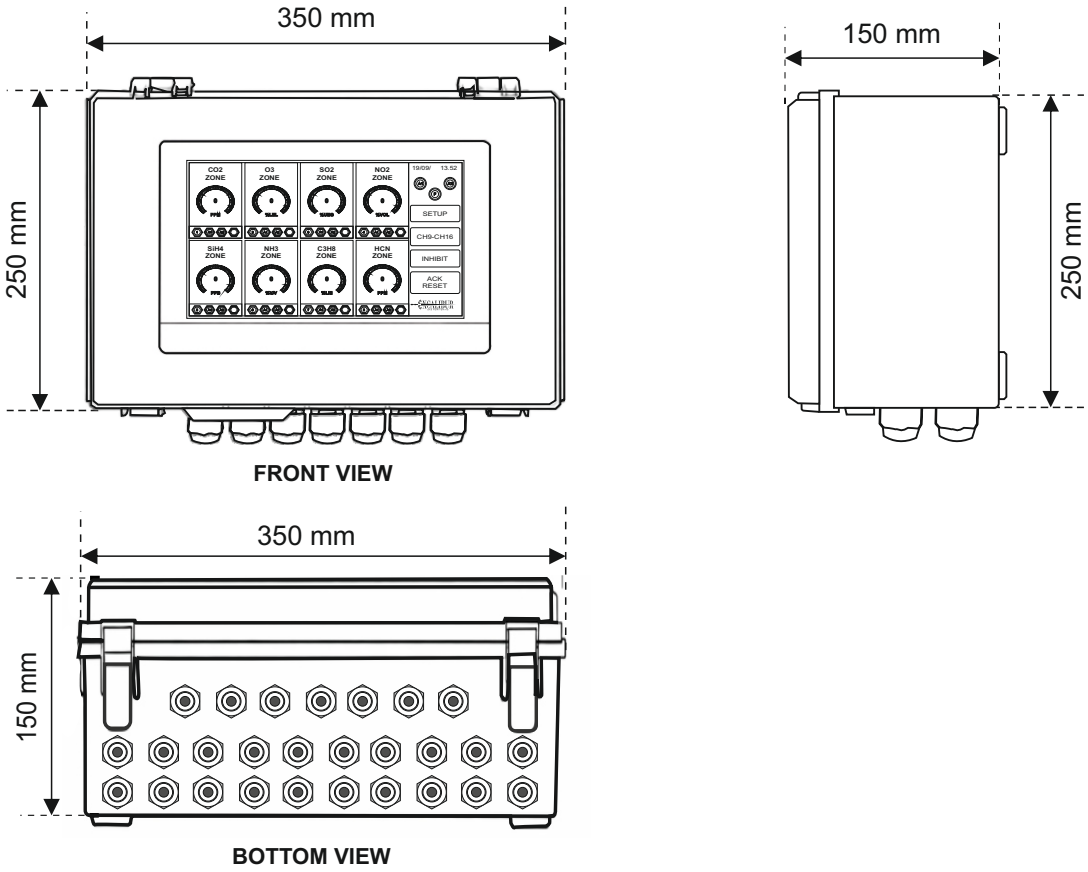
Model	Excalibur
Type	Micro-controller based, multi-channel monitoring and control of Gas Sensors.
No. of Channels	16 (optionally 8).
Input Signals	Three-wire Gas Sensors.
Indication	7-Inch Colour Graphic Touch-Display which sequentially indicates the details of the gas being monitored in each of the sixteen channels along with it's level and unit.
Operator Interface	Touch-screen display to configure the instrument, add gas names, units and location, set the measured ranges of each gas, set the required alarm levels, the alarm types and alarm delays, besides additional functions like calibration, retransmission, enabling or disabling relays, skipping channels, setting password, data logging, performing self-diagnostics, etc.
Control Outputs	32 programmable relays and 3 common fault relays.
Contact Rating	10 Ampere @ 230 VAC for non-inductive loads.
Alarm Annunciation	Acknowledge and Reset buttons on display.
Analog Outputs	16x 4 to 20 mA DC retransmission signals - one for each channel.
Load Driving Capacity	600 Ohms each.
Communication Port	RS485 on Modbus RTU.
Features	Channel Skip, Relay Disable, Latching / Non-latching, Acknowledgeable / Non-Acknowledgeable alarms.
Power Supply	24 V DC.
Enclosure	ABS, with hinged cover and SS latches.
Ingress Protection	IP67, Weatherproof.
Dimensions	350 x 250 x 150 mm (L x W x H).
Rel Humidity	0 to 95% non-condensing.
Operating Temperature	0 to 55°C.

Features

- Multifunctional architecture with simple operational procedure.
- 32-bit Microcontroller-based Central Controller card.
- Simultaneous sixteen-channel monitoring of gas levels.
- stacked cards with staggered terminal wiring.
- 32 programmable alarm set-points with potential-free relay change-over contacts.
- 3 Common Fault control relay outputs for sensor faults.
- Inhibit indication for each channel.
- Dedicated analog 4 to 20 mA DC retransmission for each channel.
- RS485 data communication on Modbus RTU protocol (up to 1.2 km distance).
- Local and Remote Acknowledge function.
- Stand-alone execution or compatible with PLC / SCADA.
- 7" color touch-screen monitor with numeric and bar-graph display.
- USB port for pen drive for downloading logged data.
- Two-year Performance Warranty.

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Dimensional Diagram



FRONT VIEW

BOTTOM VIEW

How To Order

	EXCALIBUR GAS MONITORING UNIT	**EGM-**	
	Configuration and add-on options		
1	**NUMBER OF INPUTS**		
▸	Eight		08
▸	Sixteen		16

Our Other Products



FLOW TOTALIZER | SIGNAL ISOLATORS & TRANSDUCERS | TEMPERATURE SCANNER | FLAMEPROOF INSTRUMENTS | STATIC POWER SWITCHES

Designed and Manufactured By :
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