ASHE CONTROLS PVT LTD
an ISO 9001:2015 certified company

# GGM-8/GGM-16

## GGM-Series Gladiator Gas Monitoring Units



## Overview

The Gladiator Gas Monitoring Unit is a multi-channel 19" Rack mounted Controller system that monitors the levels of up to sixteen remotely mounted Gas Sensors. The instrument is a standalone system that can be operated independently, or can also be connected to a PLC or DCS through a RS485 communication port on Modbus RTU protocol and can provide audio/visual alarms when the set values are exceeded.

The instrument offers a 7" color graphic display which sequentially indicates the details of the Gas being monitored in each of the sixteen channels along with it's level and units. This Display is also used to configure the instrument, select Gas names from a library of 24 Gases and 7 Units, set the measured Ranges of each Gas, set the required Alarm Levels, the Alarm Types and Alarm Delays, besides additional functions like Calibration, Retransmission, Drift Values, enabling or disabling Relays, Skipping Channels, setting the Password, performing self-diagnostics, etc.

The display information is multiplexed for eight channels at a time, with a Page Mode which gives complete information of any desired Channel. Further, each channel has an eight-bar multicolor LED bar-graph display for real-time monitoring of Gas levels.

The instrument offers four Relay controls for each channel with three Alarm levels and one Fault output to monitor Sensor Fault /Inhibit output, besides analog retransmission for each of the sixteen channels. Data information of all channels is available on a RS485 port on Modbus RTU protocol.

This product is backed by a full two-year warranty, covering all manufacturing defects and workmanship issues under normal operating conditions.

## Specifications

| | |
|---|---|
| **Model** | GLADIATOR GAS MONITORING UNIT |
| **Type** | Micro-controller based, multi-channel monitoring and control of Gas Sensors. |
| **No. of Channels** | 16.(optionally 8) |
| **Input Signals** | Three-wire Gas Sensors. |
| **Gas Library** | 24 Gases and 7 Units – freely customizable for each channel. |
| **Indications** | 7 Inch Colour Graphic 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, select Gas names from a library of 24 Gases and 7 Units, set the measured Ranges of each Gas, set the required Alarm Levels, the Alarm Types and Alarm Delays, besides additional functions like Calibration, Retransmission, Drift Values, enabling or disabling Relays, Skipping Channels, setting the Password, performing self-diagnostics, etc. |
| **Control Outputs** | Four control Relay outputs - three for Alarms and one for Fault/Inhibit. |
| **Contact Rating** | 10 Ampere @ 230 VAC for non-inductive loads. |
| **Alarm Annunciation** | Acknowledge and Reset Buttons On Display |
| **Analog Outputs** | 16 x 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 |
| **Termination** | On rear Mother-board. |
| **Power Supply** | 24 V DC. |
| **Execution** | 19" Rack system, 3U enclosure with modular channel-cards. |
| **Enclosure** | Aluminum Card-frame with plug-in Cards in modular system. |
| **Dimensions** | 3U x 84T x 250 mm (133.35 x 482.6 x 250 mm) for full rack. |
| **Operating Temperature** | 0 to 55$^0$C. |
| **Rel Humidity** | 0 to 95% non-condensing. |

## Features

- Multifunctional architecture with simple operational procedure.
- Simultaneous sixteen-channel monitoring of Gas levels.
- Standard 19" EuroRack execution for Full-Rack (16 channel) and Half-Rack (8 channel) options.
- Modular execution in plug-in Euro-card format with minimal rear terminal wiring.
- 16-bit Microcontroller-based Central Controller card.
- Every channel Card with independent 14-bit Microcontroller in modular configuration.
- Three programmable Alarm set-points with potential free Relay change-over contacts.
- Fault control Relay output for Sensor Fault. Total of 64 Relays per Rack
- Inhibit indication by LED flashing for each channel.
- Dedicated analog 4 to 20 mA DC retransmission for each channel (up to 1 km distance).
- RS485 Data communication on Modbus RTU protocol (up to 5 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 data logging
- Ethernet & Wifi interface options
- Bluetooth enabled keyboard & mouse connectivity
- Two-year Performance Warranty

www.ashecontrols.com • Phone : (022) 2405 1561, 2405 5791, 2405 5543 • E-mail : sales@ashecontrols.com