



**MULTI-CHANNEL GAS WARNING SYSTEM**

# GW 399



Compact

Standard

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## Application

The multi-channel gas warning system GW 399 continuously monitors the ambient air and provides an early warning of hazardous, explosive and non-combustible gases and vapours.

## Fields of Application

- Monitoring of heating systems
- Garages and tunnels
- Liquid gas storage rooms
- Laboratories
- Cold-storage houses
- Plastic processing plants
- Chemical industries
- Paint manufacturing plants
- Concentration measurement of O<sub>2</sub>
- and many more

## Features

- Use of various types of measurement sensor
- Direct warning status recognition, via different colors of the LC-Display background illumination
- Menu-aided operation, via 2 keys
- Three alarm thresholds individually adjustable from 5–100 % of the test range
- Three floating alarm outputs for driving additional warning and control systems
- Floating relay contacts
- Serial output RS 232 or RS 485
- LON<sup>®</sup>-Interface
- 4–20 mA current output
- Different housings are available e.g. 19" rack, panel mounting, wall-mounted housing
- Up to 10 units per rack
- 1 control unit configurable as master, for supervision of central alarms and communication control systems
- High degree of reliability
- Low current consumption
- Possibility of uninterruptible power supply

## Measurable gases

Gas	Formula
Acetylene	C <sub>2</sub> H <sub>2</sub>
Alcohol	e.g. C <sub>2</sub> H <sub>6</sub> O
Ammonia	NH <sub>3</sub>
Butane	C <sub>4</sub> H <sub>10</sub>
Carbon dioxide	CO <sub>2</sub>
Carbon monoxide	CO
Carbon tetrachloride	CCl <sub>4</sub>
Chloroform	CHCl <sub>3</sub>
Ether	C <sub>4</sub> H <sub>10</sub> O

Helium	He
Hydrogen	H <sub>2</sub>
Hydrogen chloride	HCl
Methane	CH <sub>4</sub>
Neon	Ne
Oxygen	O <sub>2</sub>
Petrol	
Propane	C <sub>3</sub> H <sub>8</sub>
Toluene	C <sub>7</sub> H <sub>8</sub>
Xylene	C <sub>8</sub> H <sub>10</sub>

## Accessories

Signal horn, warning light, warning banner, ventilation control, test meters, plotter.  
Additional accessories are available, depending on the system ordered.

## Technical Data

### Details as for control unit

Sensors:	Semiconductor sensor Heat reaction sensor Thermal conductivity sensor Chemical sensor Infrared sensor
Sensors input:	1 two-wire sensor (e.g. TOX 592) or 1 three-wire sensor (e.g. GTR 196)
Sensor supply:	20 V DC / 200 mA
Ranges:	Adaptable by software
Accuracy:	< 2 %, f.s.d.
Ambient temperature:	+14 °F to +104 °F
Temperature effects:	<2 % for a ±36 °F change
Installation:	Panel-mounting or Wall-mounting
Output signals:	Current output 4–20 mA RS 232 or RS 485 interface LON <sup>®</sup> -interface 3 Alarm relays, 1 Fault relay
Relay rating:	115 V, 450 VA other voltages on request
Voltage supply:	115V 60 Hz
Options:	230 V 50 Hz; 24 V DC; 12 V DC
Power consumption:	8 VA