BE ATEX

VARIOGARD

Dräger

THE AFFORDABLE MODULAR CONTROL PANEL FOR UP TO 100 TRANSMITTERS.

The VarioGard control panel is a gas detection system that supports various types of modules and measurement sensors. Visual, audible and electrical indicators are activated as soon as a gas leak is detected. The VarioGard can also control fans or activate illuminated warning signs via relays.

It can supply power to a maximum of 24 modules connected to the bus (the system's communication interface).

The VarioGard system can handle connection of up to 100 modules (relays, converters, detectors, etc.), with integration of a repeater module and an auxiliary power supply if necessary. A converter module completes the system, enabling standard 4-20mA transmitters to be connected to the VarioGard bus.

This intuitive control panel is equipped with tri-colour LEDs that indicate its operational status: green for normal operation, yellow for a warning, and red for an alarm. The control panel is configurable and can be installed and programmed according to customer specifications.

Applications: Laboratories, parking, hospitals, breweries and wines

AVAILABLE MODULES:

VarioGard Battery Module
Powers the control panel in the event of a fault. 12V lead battery and electronic regulation of the charge.

VarioGard Relay Module
An expansion module with five relays (freely programmable). Four digital inputs for dry contacts. For installation in control cabinets with an adaptation kit for wall mounting and control of illuminated signs, audible alarms or fans, etc.

VarioGard Converter Module
Extension module for the connexion of four 4-20 mA sensors and four digital inputs for the connexion of buttons, switches, etc. For installation in control cabinets with an adaptation kit for wall mounting.

VarioGard Repeater Module
Extension module with four bus outputs for the connection of up to 100 sensors. Can be connected to an auxiliary power supply if additional power is required. For installation in control cabinets with an adaptation kit for wall mounting.

SOFTWARE

Configuration and maintenance via USB interface between the control panel and a PC:

- VarioCon configuration software, to set up and configure the system

- VarioCal software to maintain and calibrate detectors

- Customer version software and system maintenance services

TECHNICAL DATA

Size: 4.7 x 4.3 x 2.4 in. (12 x 11 x 6 cm)

Weight: 4.8 lbs (2.2 kg)

Cable Inlet: M20 x 1,5 and M25 x 1,5 for mains supply

Display: LCD screen (20 caracters, 2 lines)

Analogic output: 4-20 mA

Temperature: -4˚F to 104˚F (-20˚C to +40˚C)

Humidity: 10 - 90% RH (non-condensing)

Electrical data: 3-wire cable 16 to 30V DC, GND, Dräger VarioGard® bus

Power supply and consumption: 230V CA, 50/60 Hz, <55W

Approvals: non ATEX

Warranty: 1 year

SPECIFICATIONS :

INPUT & OUTPUT SPECIFICATIONS

Inputs: three-core connection (not shielded)
(two power wires and one ground bus wire)
M20 x 1.5; 6mm to 12mm
M25 x 1.5; 9mm to 16mm (mains power)

Switching outputs: five integrated relays that can be configured using dedicated software VarioCon (customer) and VarioCon Service (Dräger customer support)

Five relay contacts of:

· max. 5A / 250V AC

· max. 3A / 30V DC

· min. 0.1A / 10V AC/DC

ALARMS

Relays: four concentration alarms and four average alarms that can be programmed for four relays integrated into the control panel plus one fault relay

Single-pole double-throw contact 5A to 230 V AC, 5A to 30 V DC, linked to the resistor.

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AVAILABLE DETECTORS :

VARIOGARD 3000 EC SENSOR

Equipped with an electrochemical (EC)

DrägerSensor XXS to detect toxic vapours and gases

Aluminium or plastic housing

Sensors available depending on the application:

- Parking facilities: CO, NO_2, NO

- Refrigerated warehouses: O_2 and NH_3

- Laboratories (liquid nitrogen monitoring): O_2

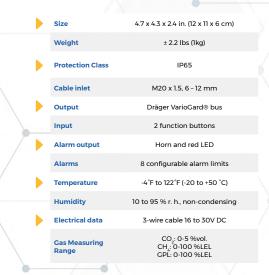|	
Size	Plastic housing: 4.7 x 4.3 x 2.4 in. (12 x 11 x 6 cm) Aluminium housing: 4.7 x 4.3 x 2.4 in. (12 x 12 x 6 cm)"
Weight	Plastic housing: ± 0.88 lb (400 g) Aluminium housing: ± 2.2 lbs (1kg)
Protection Class	IP65
Cable inlet	M20 x 1.5, 6 – 12 mm
Output	Dräger VarioGard® bus
Input	2 function buttons
Alarm output	Horn and red LED
Alarms	8 configurable alarm limits
Temperature	-4˚F to 122˚F (-20 to +50 ˚C)
Humidity	10 to 95 % r. h., non-condensing
Electrical data	3-wire cable 16 to 30V DC
Gas Measuring Range	CO: 0-300 ppm NH_3: 0-1200 ppm O_2: 0-25 %vol. NO: 0-50 ppm NO_2: 0-20 ppm

VARIOGARD 33X0 IR SENSOR

Equipped with an infrared (IR) DrägerSensor to detect flammable vapours and gases

Aluminium housing

Sensors available depending on the application:

- Parking facilities: CH4 and LPG monitoring for vehicles that run on gas (3300 IR version)

- Breweries and wine cellars: CO_2 (3320 IR version)

- Laboratories (cell culture labs): CO_2 (3320 IR version)

Size	4.7 x 4.3 x 2.4 in. (12 x 11 x 6 cm)
Weight	± 2.2 lbs (1kg)
Protection Class	IP65
Cable inlet	M20 x 1.5, 6 – 12 mm
Output	Dräger VarioGard® bus
Input	2 function buttons
Alarm output	Horn and red LED
Alarms	8 configurable alarm limits
Temperature	-4˚F to 122˚F (-20 to +50 ˚C)
Humidity	10 to 95 % r. h., non-condensing
Electrical data	3-wire cable 16 to 30V DC
Gas Measuring Range	CO_2: 0-5 %vol. CH_4: 0-100 %LEL GPL: 0-100 %LEL

VARIOGARD 23X0 IR SENSOR

Affordable 4-20mA version

Equipped with an infrared (IR) DrägerSensor to detect carbon dioxide and flammable vapours

Plastic housing

Sensors available depending on the application:

- Parking facilities: CH_4 and LPG monitoring for vehicles that run on gas (2300 IR version)

- Breweries and wine cellars: CO_2 (2320 IR version)

- Laboratories (cell culture labs): CO_2 (2320 IR version)

Size	4.7 x 4.3 x 2.4 in. (12 x 11 x 6 cm)
Weight	± 2.2 lbs (1kg)
Protection Class	IP65
Cable inlet	M20 x 1.5, 6 – 12 mm
Output	4-20 mA
Temperature	-4˚F to 122˚F (-20 to +50 ˚C)
Humidity	10 to 95 % r. h., non-condensing
Electrical data	3-wire cable 16 to 30V DC, GND, Dräger VarioGard® bus
Gas Measuring Range	CO_2: 0-5 %vol. CH_4: 0-100 %LEL GPL: 0-100 %LEL

VARIOGARD 3200 CAT SENSOR

Equipped with a catalytic explosion (CatEx) DrägerSensor to detect flammable vapours and gases

Aluminium housing

Sensors available depending on the application:

- Parking facilities: CH_4 and LPG monitoring for vehicles that run on gas

- Laboratories (product storage): CH_4

Size	Gas Measuring Range
Weight	1kg
Protection Class	IP65
Cable inlet	M20 x 1,5 de 6 – 12 mm
Output	Bus VarioGard
Input	Boutons 2 fonctions
Alarm output	Buzzer et LED Rouge
Alarms	8 seuils d'alarmes
Temperature	-20 à + 50˚C
Humidity	10 à 95 %HR (sans condensation)
Electrical data	3 fils de 16 à 30 V CC
Gas Measuring Range	CH_4: 0-100 %LEL GPL: 0-100 %LEL