BE ATEX

REGARD 7000

Dräger

THE ATEX, SIL2 AND SIL3 CONTROL PANEL FOR UP TO 1,536 CHANNELS FOR THE MOST COMPLEX FACILITIES.

The Regard 7000 is a modular control unit for fire and gas detection systems. It continuously monitors fire outbreaks and gas and/or vapour concentrations in ambient air. It is an intelligent system, capable of:

- Providing power to connected sensors and transmitters (max. 2A per input module)

- Analysing input signals and status

- Controlling corresponding alarm devices

Some Regard 7000 models are designed to meet SIL2 and SIL3 requirements. It uses a masterless, distributed intelligence architecture. It can control 1,536 channels and host up to 24 docking stations that can each accommodate 8 modules. Each module has its own processor and operates independently.

This means that if one module fails, it will not cause the other modules to fail. The faulty module can be replaced without having to cut the power. Each system fault is signalled by the system fault relay (SFR) installed in each docking station.

Communication between the modules is carried out via a proprietary Safety-Ethernet protocol. Each device sends all the others its updated data in an Ethernet frame format. If the system receives more than two packets of invalid data, it issues an alert and activates the SFR. The measured values can be continuously displayed on one or more screens and transmitted to higher-level control stations via Modbus output modules. This information is reserved for the Regard 7000 Ethernet network rather than a general IT network.

The Regard 7000 supports the HART protocol, meaning all connected HART-enabled transmitters can be accessed remotely from a central point. This ensures maintenance work can be planned, and staff can be managed more efficiently. In addition, it ensures a channel can be quickly configured automatically by retrieving information transmitted by the connected HART transmitter, or semi-automatically via the configuration assistant.

Applications: water treatment, pharmaceutical industry, chemical industry, micro-electronics, petrochemicals, refineries, etc.

SPECIFICATIONS

- Up to 1,536 Input/Output channels
  (from 1 input / 1,535 outputs to 1,535 inputs / 1 output)

- Backwards-compatible with previous generations of Regard systems

- Atex, SIL2 and SIL3 approved

- Operates without a master control panel

- HART communication with Dräger and non-Dräger detectors

TECHNICAL DATA

Size:
Advanced Dashboard 6RU: 10.47 x 19.02 x 2.68 in.
(26.6 x 48.3 x 6.8 cm)
Advanced Dashboard PM: 11.26 x 13.66 x 2.68 in.
(28.6 x 34.7 x 6.8 cm)
Dockingstation 8-slot: 7.24 x 15.75 x 3.07 in. (18.4 x 40.0 x 7.8 cm)
Dockingstation 4-slot: 7.22 x 8.37 x 3.07 in. (18.4 x 21.3 x 7.8 cm)

Weight:
Advanced Dashboard 6RU: 8.16 lbs (3.8 kg)
Advanced Dashboard PM: 8.16 lbs (3.7 kg)
Dockingstation 8-slot: 5.73 lbs (2,6 kg)
Dockingstation 4-slot: 5.73 lbs (0.9 kg)

Protection Class: IP65

Display: Dashboard 6RU, PM

Temperature: +32˚F to 122˚F (0˚C to +50˚C)

Humidity:
Without dashboard: 5 - 95% RH (non-condensing)
With dashboard: 20 to 90% RH (non-condensing)

Power supply: 24V DC

Power consumption: Max 22 A

Approvals: ATEX II (2) G, TRL 06 ATEX 21099X

Warranty: 1 year

FOR FULL SYSTEM, COMBINE:

Dräger REGARD® 7000 Dockingstation:
8-slot, 4-slot

Dräger REGARD® 7000 Advanced Dashboard:
6 RU, PM

Dräger REGARD® 7000 Terminal Block:
24-pin AC, 24-pin DC, 2-pin, 16-pin

AVAILABLE MODULES

4-20MA HART-COMPATIBLE INPUT MODULE:

Monitors the signals and transmits data to the entire system.

- Eight 4-20mA Hart input channels
- Eight alarm setpoints configurable by input
- Eight different special configurable signals (mA)
- Clear interpretation of these special signals
- Alarms can be cleared via a 0 to 5 second time delay
- Compatible with all Dräger detectors
- 24V, 2A power supply

BRIDGE MODULE:

Can be used to connect decentralised or separate REGARD® systems.

- Can be used to connect a Regard system to the Regard 7000
- Can be used to extend an existing Regard system with REGARD 7000 components

RELAY MODULE COMPLEX:

Groups together special signals and alarm messages.

- Eight contacts per module
- SIL2-certified contacts
- Enables the combination of alarms and special signals (complex systems)
- Possible to configure a relay activation lead time of between 1 second and 100 minutes

LONG DISTANCE GATEWAY:

Gateway enabling connection of spatially remote systems.

- Enables externalisation of a docking station
- Covers distances up to 4,000 m with conventional copper cable (twisted pair)

DIGITAL INPUT MODULE:

- Eight digital inputs for all information types
- Eight channels for management of high/low priority information (mA)
- 24V supply voltage, max. 2A supply current
- Inputs compatible with smoke detectors N/A

MODBUS GATEWAY SET:

Transfers data in complete security to external systems.

- Set = Modbus Module + Modbus Gateway + RTU + Junction Box
- The interface transmit all transmitter information (gas, scale, unit, diagnostics, etc.) directly to an external system

RVP 7000

The RVP 7000 is a touchscreen designed for visualisation and management of data from the REGARD 7000 control panel:

- Visualisation of data: tables, alarm messages and icons.
- Trend lines: diagrams indicate gas concentrations at a measurement point over the last 365 days.
- Data log and event list: records the values measured and the events over a one-year period, at two-second intervals.
- Web server (optional): can be used to view the screen on an additional PC. Up to three devices simultaneously.