

MODEL DT210

Eight-Channel Readout/Relay Module



Features

- Compact Packaging
- Large Digital Display
- LED Readouts for Each Channel
- Common Relays
- Safe, Easy Calibration

Benefits

- · Requires less panel or cabinet space
- Provides clear display of the Peak Channel Reading
- Shows the status of each channel including Alarms, Calibration, Malfunction, and Reset
- Indicates ALARM, WARN, & MALFunction Alarms
- Longer product life

Description

The Model DT210 is an eight-channel Readout/Relay Module designed to be used with up to eight remotely located General Monitors $\rm H_2S$ Smart Sensors. The front panel contains a digital display that indicates 0-20 ppm (parts per million), 0-50 ppm, or 0-99 ppm of the gas being monitored by the Intelligent Sensors.

Each of the eight H₂S Smart Sensors is also provided with open collector outputs from the DT210 for the ALARM, WARN, and MALFunction conditions. These open collector outputs are referenced to DC return and will sink a maximum of 100mA when active. The open collector outputs are capable of handling external circuitry within a voltage range of 3 to 50 VDC.

Recommended uses for the open collector outputs include external relay circuit when contact closures are desired for each Smart Sensor; external logic interface (TTL, CMOS, HTL, etc.) to a central computer or control room, and external test circuitry.

The Model DT210 can be supplied with a special voting option which must be specified when ordering. A system supplied with this option will require that two channels reach the alarm setpoint before the alarm relay will actuate. All other functions remain the same.

Applications

- Chemical and Petrochemical Plants
- Desulfurization Facilities
- Drilling Platforms and Rigs
- Gas and Oil Production Platforms
- Mud-logging Operations
- Oil Recovery/Reinjection
- Refineries
- Wastewater Treatment Plants
- Wellhead Sites



MODEL DIS10

System Specifications

Input Current: 0-20mA from S4000TH

Display Range: 0-99 ppm, flashing 99 for

over-range indication

Accuracy: ± 2ppm or 10% of the applied

gas, whichever is greater

Front Panel

Switches: Channel select, Reset

Alarm Disable: 9 position rotary switch

Alarm Setting: 16 position rotary switch

Warning Setting: 16 position rotary switch

Alarm & Warn

Incorporated with Reset LED test:

switch (hold over one second)

Jumper selectable - option -Voting:

one or two channels ALARM

only

Energized/ De-Energized

Relay Options: ALARM and WARN set by

DIP switch

Latching/ Non-Latching

Relay Options: ALARM and WARN set by

DIP switch

Set by DIP switch for each **Channel Enable:**

channel

Reset: One momentary push

button switch

Remote Reset: Yes

Electrical

Classification: General purpose.

non-hazardous areas

Warranty: Two years CSA, FM Approvals:

Environmental Specifications

Operating Temperature

Range: 32°F to 140°F

(0°C to 60°C)

Storage

Temperature Range:

-28°F to 130°F

(-33°C to 54°C)

Operating

Humidity Range: 10-95% non-condensing

Electrical Specifications

Input Power: 22-30 VDC 8 watts DT210

plus 7 watts for each

. S4000TH

Channel Input

Resistance: 125 ohms maximum

Output Power: 24 VDC nominal at 0.25 amp

to each S4000TH

Status Indicators: RESET, Ø, 8 Discrete indicators for ALARM,

WARNing, MALFunction, CALIBrate, PEAK Channel

Relay Ratings: 4A @ 250 VAC / 30V RMS/42.4 peak, 3A @ 30 VDC, resistive

max. A1, A2 - DPDT Fault-

SPDT

Cable

4 wire shielded cable. Max. Requirements:

allowable distance between sensor and DT210 with one way resistance of 4 ohms (total 8 ohms) @24 VDC

nominal:

14 AWG-1500 ft. (700m)

Mechanical Specifications

Dimensions: 2.1"w x 6.9"h x 11.5"d

(53mm x 175mm x 294mm)

Weight: Approx. 3.8 lb. (1.8kg)

Mounting

Configurations: Rack, Panel, Wall,

& Explosion-proof Enclosures

Standard

Configuration: DT210-1-1-2-8

Latch alarm, non-latch warn, de-energized, 99 ppm, voting

off, 8 active channels

Specifications subject to change without notice.

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