

# IR22 F Transmitter

**Optional local alarms for each transmitter location**



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## Optional local alarms for each transmitter location

### CO<sub>2</sub> detection for cold storage

Carbon dioxide leaks in cold storage rooms can quickly become dangerous because CO<sub>2</sub> refrigeration systems operate at high pressures. In the case of subcritical and transcritical systems, these are often above 100 bar.

The IR22 F transmitter reliably monitors the CO<sub>2</sub> concentration under the toughest of conditions, while providing additional safety functions.

### Robust and durable

The rugged IP65 IR22 F transmitter measures carbon dioxide (CO<sub>2</sub>) from -40 °F to +140 °F.



Switching outputs

Two switching outputs enable connectivity to additional safety devices, such as audible and visual alarms or self-contained alarm push buttons for each detection point. Tri-Color LED status (green, yellow and red) provides instant operating status of the transmitter.

### Digital, analog or ACDC

The IR22 F is available with digital RS-485 interface and Modbus protocol or as analog 4-20 mA. It is also ACDC-capable (Analog Carrier for Digital Communication) which allows additional data to be transmitted digitally over the 4-20 mA cabling.

Dependant on transmitter quantity and the connected alarm devices, bus cable lengths of up to 3/4 of a mile are possible.



Alarm panel



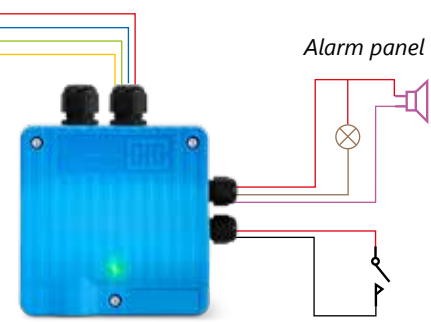
Push button manual alarm

### Manual alarm and acknowledgement

The digital input can be used to connect a manual push button for instant alarm activation / alarm acknowledgement.



Connection and configuration example



e.g. manual alarm button or acknowledgement of the horn

## Technical Data: IR22 F

**Gas:** Carbon dioxide (CO<sub>2</sub>)

**Measuring principle:** Infrared (IR)

**Detection range:**

Range: 0 to 5% volume

Resolution: 0.01% volume

**Gas supply:** Diffusion or gassing per calibration adapter

**Expected sensor life:** Greater than 5 years

**Response time:** t<sub>90</sub> < 50 s

**Temperature:** -40 to +140 °F / -40 to +60 °C

**Humidity:** 0 to 95% r. h. non-condensing

**Pressure:** 70 to 130 kPa

**Output signal:**

Analog: 4-20 mA with ACDC

Digital: RS-485 Modbus

**Switching outputs:** 2x Open collectors

**Digital input:**

Binary input, optionally quiescent or operating current, for manual alarms

**Power supply:** 12 to 30 V DC

**Housing:** Plastic

**Protection class:** IP65

**Dimensions:** 3.8 x 4.75 x 2 in /  
96 x 123 x 49 mm  
(W x H x D)

**Weight:** 4.4 to 5.3 oz / 125 to 150 g



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All specifications on this brochure are subject to technical changes due to further development.

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