

**RED RAVEN™**

DATA TRANSFER BOX

The Data Transfer Box facilitates data transfer between the equipment-mounted sensor to the Insight Portal. Flowserve developed the Insight Portal to deliver users 24/7 remote online condition monitoring and predictive analytics capabilities. There, users can monitor equipment performance in near real-time and identify problems before they lead to downtime and disruptions.

Technicians install a Detect sensor and a Data Transfer Box on the equipment they want to monitor. The Data Transfer Box securely transfers equipment performance data to the data server via a mobile or local network, where Flowserve's algorithms continuously detect anomalies and failure conditions. An early warning notification is then sent to the customer as soon as an abnormal condition is detected.

Delivery options

Data Transfer Boxes are available in an explosion protection construction, enabling them to be safely installed in hazardous areas and eliminating the need for long cables. Data Transfer Boxes are based on a modular platform.

The following sensors can be combined:

- Detect
- Pressure sensors
- Flow meters
- PT100 temperature sensors
- 4–20 mA transmitters






REDRAVEN™ Data Transfer Box

Technical data

Housing

	Non-Ex version	Ex version
Ex-marking	Non (Installation of Data Transfer Box must be done in the non-Ex Area; option: Transmitter supply units for intrinsic safe sensors can be installed.)	 ATEX Ex II 2 G db IIB H2 T6 Gb IECEX Ex db [ia Ga] IIB T5 Gb UL NEC 505 Class I, Zone 1, AEx d IIB+H2 T5 Class I, Div 1, Groups B, C, D Class II, Div 1, Groups E, F, G
Materials	Polyamide cabinet with/without inspection window	Saltwater-resistant aluminum alloy Powder-coated finish surface
Dimensions and weights	400 x 600 x 200 mm → 15.8 x 23.7 x 7.9 in 12 kg → 26.5 lb	ATEX, IECEX 430 x 530 x 283 mm → 16.9 x 20.9 x 11.1 in 47 kg → 104 lb UL NEC 505 565 x 365 x 260 mm → 22.4 x 14.4 x 10.2 in 47 kg → 104 lb

Environmental condition

	Non-Ex version	Ex version
Degree of protection	IP54	IP66
Allowed ambient temperature	T _a = -20°C to 55°C (-4°F to 131°F)	T _a = -20°C to 50°C (-4°F to 122°F)

Electrical supply data

	Non-Ex version	Ex version
Rated voltage	100 to 240 VAC 50/60 Hz	100 to 240 VAC 50/60 Hz
Rated current	Max. 1.3 A at 110 VAC	Max. 1.3 A at 110 VAC

Cloud connection

	Non-Ex version	Ex version
	Wireless cellular network	Wireless cellular network
	Wired network	Wired network

Sensor combination per unit

	Non-Ex version	Ex version
	Standard	Intrinsic safe sensors Ex ia
	4 x Detect (4-20 mA HART®)	4 x Detect Ex (4-20 mA HART)
	3 x process sensors (4-20 mA two-wire)	3 x process sensors (4-20 mA two-wire)
	1 x temperature sensor (PT100 three-wire)	1 x temperature sensor (PT100 three-wire)