



REDRAVEN™

DATA TRANSFER BOX

The Flowserve Data Transfer Box (DTB) is the backbone of RedRaven predictive analytics for pumps, seals and valves. The box is used to send data from wired sensors to the Flowserve cloud over LAN or cellular connections. This data is analyzed in the Insight portal to provide near real-time equipment monitoring to identify problems before they lead to downtime.

The data acquisition equipment is specifically engineered for capturing multiple types of data including vibration, temperature, pressure and flow along with a wide variety of other sensor inputs that contribute to a full-system view.

Delivery options

The Data Transfer Box is available in many standard options to fit a wide variety of needs. The modular platform uses the same internal hardware in different enclosures to meet three area classifications:

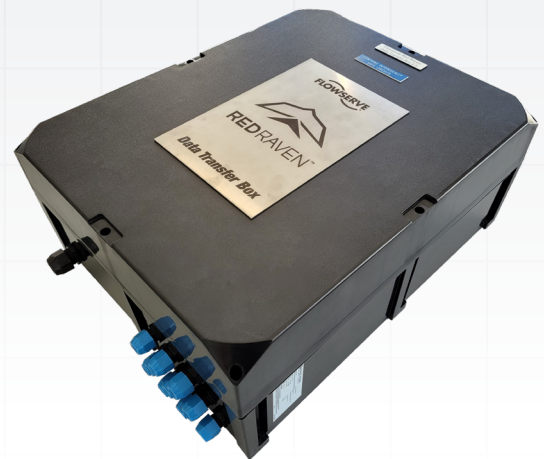
- Safe Area (non-explosive atmospheres)
- Ex e ATEX Zone 2
- Ex d Class 1 Div 1 or IECEx/ATEX Zone 1

Internal hardware is configured to receive signals from up to 20 individual channels. The modular design can take data from almost any sensor type including:

- RedRaven Detect vibration sensor or Industrial IEPE accelerometer
- Pressure transducers
- Flow meters
- Temperature (PT100 RTD or TC of any type)
- VFD input
- 4-20 mA transmitters
- Digital input



DTB Ex d



DTB Ex e



DTB Non-EX



REDRAVEN™ Data Transfer Box

Technical data

Housing	Safe Area	Ex e	Ex d
Marking	None – box must be installed in safe area. Intrinsically safe inputs available on request.	ATEX Ex II 3 (1) G Ex db eb nA nC [Ia Ga] IIC T6 Gc	ATEX II 2 (1) G D IECEX Ex db mb [Ia Ga] IIB + H2 T6 Gb ETLus Class I Zone 1 Groups B, C, D Class I Div. 1 Groups B, C, D, T4
Materials	Polycarbonate	Polyester	Aluminum
Dimensions and weights	600 x 400 x 210 mm (23.6" x 15.7" x 8.3") 11 kg (20 lbs)	480 x 600 x 240 mm (18.9" x 23.6" x 9.4") 18 kg (40 lbs)	Small Enclosure (10 input channels) 360 x 470 x 265 mm (14.2" x 18.5" x 10.4") 34 kg (75 lbs) Large Enclosure (20 input channels) 580 x 430 x 290 mm (22.8" x 16.9" x 11.4") 58 kg (128 lbs)

Environmental condition

Degree of protection	IP66 / NEMA 4X
Allowed ambient temperature	Ta = -10°C to 40°C (14°F to 104°F)

Electrical supply data

Rated voltage	100 to 240 VAC 50/60Hz or 24 VDC
Rated current	Max 1.6 A at 110 VAC or Max 4.0 A at 24 VDC

Connections

Cloud Database	Wireless cellular network Wired network
Modbus TCP/IP	OPC UA or Fieldbus Interface (after consultation)