

dBi MODBUS INTELLIGENT TRANSDUCERS

Technical Specifications:

The dBi-Modbus series of transducers are the ultimate low power devices that benefit from Modbus communication.



PHYSICAL: TRANSDUCER SPECIFIC

	dBi-M3	dBi-M6	dBi-M10	dBi-M15
Sensor Body Dimensions:	77 mm D x 134 mm H (3 in x 5.3 in)	86 mm D x 121 mm H (3.4 in x 4.8 in)	86 mm D x 121 mm H (3.4 in x 4.8 in)	86 mm D x 121 mm H (3.4 in x 4.8 in)
Weight:	1 kg (2.2 lb)	1.2 kg (2.7 lb)	1.3 kg (2.9 lb)	1.4 kg (3.1 lb)
Measurement Range:	125 mm to 3 m (4.9 in to 9.8 ft)	300 mm to 6 m (11.8 in to 19.7 ft)	300 mm to 10.1 m (11.8 in to 32.8 ft)	500 mm to 15 m (19.7 in to 49.2 ft)
Beam Angle:	<10°	<10°	<10°	<8°
Accuracy	2 mm (0.08 in)	4 mm (0.2 in)	3 mm (0.1 in) up to 6 m (19.7 ft) range 6 mm (0.2 in) over 6 m (19.7 ft) range	5 mm (0.2 in) up to 10 m (32.8 ft) 10 mm (0.4 in) over 10 m (32.8 ft) range
Resolution:	1 mm (0.04 in)	2 mm (0.08 in)	3 mm (0.1 in)	5 mm (0.2 in)

PHYSICAL: ALL TRANSDUCERS

Sensor Body Material: Valox 357 PBT

Cable Lengths: Standard: 5 m, 10 m, 20 m, or 30 m (16.4 ft, 32.8 ft, 65.6 ft, or 98.4 ft)

Optional up to 150 m (492.1 ft) maximum (increments of 10 m (32.8 ft) only)

Mounting Connection: 1" BSP or NPT

ENVIRONMENTAL

Enclosure Protection: IP68 / NEMA 6P

Max. And Min.

-40 °C to +80 °C (-40 °F to +176 °F), options for front thread and flange mounting

APPROVALS

CE Approval: Listed in the Certificate of Conformity within the manual

Standard: Zone 0: II 1 G Ex ia IIC T4 Ga, IECEx, UKEx & ATEX

Standard: Zone 0: II 1 D Ex ia IIIC T130°C Da,

Approvals: Tamb = $-40 \, ^{\circ}\text{C}$ to $+80 \, ^{\circ}\text{C}$.

Also suitable for zones 1, 2, 21 and 22.

PERFORMANCE

Input Voltage Range: 5-15 V DC

Output: Modbus RTU via RS-485

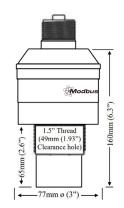
Current Consumption: Average 14 mA, 0.006 mAh per measurement.

Boot Time: 1 second for the first measurement

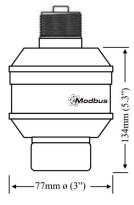
Communcations Protocol: Modbus RTU

TRANSDUCER OPTIONS

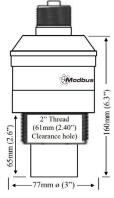
	dBi-M3	dBi-M6	dBi-M10	dBi-M15
PVDF:		\checkmark	\checkmark	
Front Threaded / PVDF:	\checkmark	\checkmark	\checkmark	
Submergence Shield:	✓	\checkmark	\checkmark	\checkmark
Flanged DIN / ANSI:		\checkmark	\checkmark	\checkmark
Foam Face:			\checkmark	\checkmark
Sanitary Flange	\checkmark	\checkmark	\checkmark	
Intrinsically Safe of All the Above:	\checkmark	\checkmark	\checkmark	\checkmark



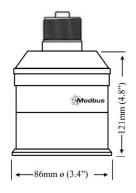
dBi-M3 & dBi-M6 Front Thread



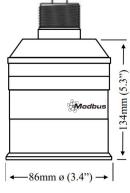
dBi-M3 Rear Thread



dBi-M10 Front Thread



dBi-M6 & dBi-M10 Rear Thread



dBi-M15 Rear Thread



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