

# dBi HART INTELLIGENT TRANSDUCERS

## Technical Specifications:

The Pulsar dBi HART Transducer Series is a range of self-contained, intelligent, non-contacting ultrasonic level measurement transducers which make use of HART communication protocols to make plant integration simple.



### PHYSICAL: TRANSDUCER SPECIFIC:

	<b>dBi3</b>	<b>dBi6</b>	<b>dBi10</b>	<b>dBi15</b>
<b>Sensor Body Dimensions:</b>	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)
<b>Weight:</b>	1 kg (2.2 lb)	1.2 kg (2.7 lb)	1.3 kg (2.9 lb)	1.4 kg (3.1 lb)
<b>Measurement Range:</b>	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)
<b>Frequency:</b>	125kHz	75kHz	50kHz	41kHz
<b>Beam Angle:</b>	<10°	<10°	<10°	<8°
<b>Accuracy</b>	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
<b>Resolution:</b>	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 1" NPT

### ENVIRONMENTAL

**Enclosure Protection:** IP68 / NEMA 6P

**Max. And Min. Temperature (Electronics):** -40 °C to +80 °C (-40 °F to +176 °F), options for front thread and flange mounting

### PERFORMANCE

**Input voltage range:** 10-28 V DC

**Output:** 4-20mA output, resolution 1µa

**Current Consumption:** 3.8-22mA

**Boot Time:** From power-up to stable reading:  
Cold boot = 8 seconds,  
Warm boot (within 12 hours from last start-up) = 4 seconds

**Communications Protocol:** HART 7

## APPROVALS

### CE Approval:

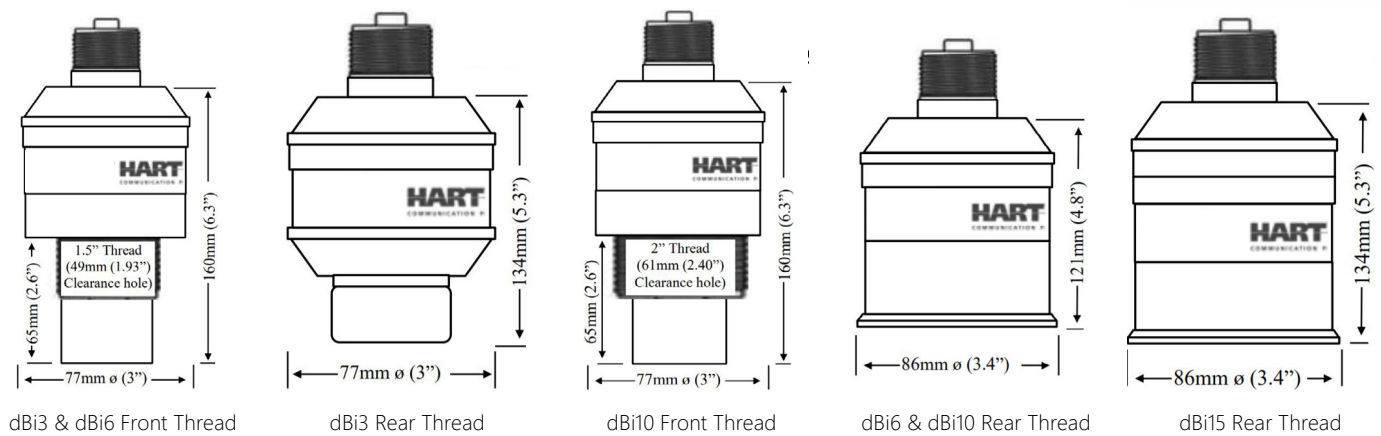
Listed in the Certificate of Conformity within the manual

### ATEX Approval:

Standard: Zones 1 & 2 to Ex II 2 G Ex mb IIC T4 Gb, Ex II 2 D Ex mb IIIC T130 °C Db, Tamb= -40 °C to +80 °C  
 Optional: Zone 0 to Ex II 1 G Ex ia IIC T4 Ga, Ex II 1 D Ex ia IIIC T130 °C Da, Tamb= -40 °C to +80 °C

## TRANSDUCER OPTIONS

	dBi3	dBi6	dBi10	dBi15
<b>PVDF:</b>		✓	✓	
<b>Front Threaded / PVDF:</b>	✓	✓	✓	
<b>Submergence Shield:</b>	✓	✓	✓	✓
<b>Flanged DIN / ANSI:</b>		✓	✓	✓
<b>Foam Face:</b>			✓	✓
<b>Sanitary Flange</b>	✓	✓	✓	
<b>Intrinsically Safe of All the Above:</b>	✓	✓	✓	✓



## Delivering the Measure of Possibility

Pulsar Measurement offers worldwide professional support for all of our products, and our network of global partners all offer full support and training. Our facilities in Malvern, UK and Largo, USA are home to technical support teams who are always available to answer your call or attend your site when required. Our global presence, with direct offices in the UK, USA, Canada, and Malaysia, allows us to create close relationships with our customers and provide service, support, training, and information throughout the lifetime of your product.

For more information, please visit our website:

[www.pulsarmeasurement.com](http://www.pulsarmeasurement.com)



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