## dBi PROFIBUS Transducers

Non-Contacting Loop Powered Ultrasonic Transducer Series with Profibus PA communication protocol

The Pulsar dBi Profibus PA Transducer Series are a range of self-contained, intelligent non-contacting ultrasonic level measurement transducers which make use of Profibus PA communication protocols. Four range choices are available with either 3m, 6m, 10m, or 15m rnage (10ft, 20ft, 33ft or 49ft), all of which take simplicity, convenience and accuracy to a new level.

## Technical Specification:

| TRANSDUCER SPECIFIC: |                                                                |                   |                    |            |             |                                                                             |             |  |
|----------------------|----------------------------------------------------------------|-------------------|--------------------|------------|-------------|-----------------------------------------------------------------------------|-------------|--|
| Model:               | Dimensions:                                                    | Weight:           | Measurement Range: | Frequency: | Beam Angle: | Accuracy:                                                                   | Resolution: |  |
| dBi3:                | 77mmD x 134mmH (3 x 5.3inch)<br>Rear thread 1" BSP/NPT         | 1kg (2.2lbs)      | 0.125-3m (5"-10ft) | 125KHz     | <10°        | 2mm (0.08in)                                                                | 1mm (0.04") |  |
| dBi6:                | 86mmD x 121mmH (3.38 x<br>4.75inch) Rear thread 1" BSP/<br>NPT | 1.2kg<br>(2.7lbs) | 0.3-6m (1"-20ft)   | 75KHz      | <10°        | 4mm (0.16in)                                                                | 2mm (0.08") |  |
| dBi10:               | 86mmD x 121mmH (3.38 x<br>4.75inch) Rear thread 1" BSP/<br>NPT | 1.3kg<br>(2.9lbs) | 0.3-10m (1"-33ft)  | 50KHz      | <10°        | 3mm (0.12") up<br>to 6mm (20ft)<br>6mm (0.24")<br>over 6m range             | 2mm (0.08") |  |
| dBi15:               | 86mmD x 135mmH (3.38 x<br>5.32inch) Rear thread 1" BSP/<br>NPT | 1.4kg<br>(3.1lbs) | 0.5-15m (20"-49ft) | 41KHz      | <8°         | 5mm (0.2") up<br>to 10m (33ft)<br>range & 10mm<br>(0.39") over<br>10m range | 5mm (0.02") |  |

| PHISICAL:                      |                                                                                                                                  |  |  |  |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Housing material:              | Valox 357 PBT (Polybutylene terephthalate)                                                                                       |  |  |  |
| Temperature Compensation:      | Internal temperature sensor, +/- 0.5°C/F                                                                                         |  |  |  |
| Transducer Cable Requirements: | Twin screened. Integral cable length 5,10,20 or 30m                                                                              |  |  |  |
| Operating temperature range:   | -40°C to +80°C Process Temperature (-40°F to +176°F)                                                                             |  |  |  |
| Ingress Protection:            | IP68 to BS EN 60068-2-17:1995 and BS EN 60529 (Nema 6P available)                                                                |  |  |  |
| Approvals:                     | See EC Declaration of Conformity in the manual                                                                                   |  |  |  |
| Hazardous Area Approval:       | ATEX; Ex ia Zone 0 and FISCO                                                                                                     |  |  |  |
| Power:                         | Bus powered, per IEC 61158-2;20mA (general purpose or I.S. version) 20mA 18-24vdc                                                |  |  |  |
| Update Time:                   | 1-2 seconds at 20mA current loop                                                                                                 |  |  |  |
| Programming:                   | PA modem; Simatic PDM, EDDL, FDT/DTM on request. PC interface 2-wire loop powered from PC or laptop. No external power required. |  |  |  |
| Outputs:                       | Profile 3.0.2, Class A with I&M functionality                                                                                    |  |  |  |

Pulsar Process Measurement Ltd. operates a policy of constant development and improvement and reserves the right to amend technical details as necessary.

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