

Level

Volume

Flow

Pump Control

Differential

# mmWAVE RADAR

## Non-Contacting Radar Transducer

The mmWAVE RADAR is a non-contacting radar transducer for level, volume, flow measurement and pump control. It is compatible with all Pulsar controllers so that you have a specific solution to suit your application requirements. It is also retrofittable to all existing Pulsar controllers in the field. Compact, lightweight and effective radar sensing.



## Technical Specification:

### PHYSICAL:

<b>Model:</b>	<b>dBR16</b>
<b>Dimensions:</b>	Norminal 90Dmm x 130Hmm (3.54in x 5.11in)
<b>Weight:</b>	Nominal 1.1kg (2.4lbs)
<b>Measurement Distance:</b>	16m (52.5ft)
<b>Frequency:</b>	V-band
<b>Beam Angle:</b>	8°
<b>Sensor body material:</b>	Valox 357U
<b>Cable lengths:</b>	Standard = 5m, 10m, 20m or 30m (16.4ft, 32.8ft, 65.6ft or 98.4ft). Optional: up to 150m (492ft) maximum (increments of 10m / 32.8ft only)
<b>Maximum separation:</b>	500m (1640ft)
<b>Mounting connection:</b>	1" BSP or NPT

### ENVIRONMENTAL:

<b>Enclosure protection:</b>	IP68 / NEMA 6P
<b>Max. and min. temperature (electronics):</b>	-40°C to +80°C (-40°F to +176°F)
<b>Process pressure:</b>	-1 to +4 bar (-14.5 to 58 psi)

### APPROVALS:

<b>CE approval:</b>	Complies with EN61326-1:2013 for emissions and immunity Complies with EN302-729:2016 for radar emissions and immunity
<b>ATEX approval:</b>	ATEX Zone 0 (Ex ia): Ex II 1 G Ex ia IIC T4 Ga Ta = -20°C to +80°C, Ex II 1 D Ex ia IIIC T135°C Da Ta = -20°C to +80°C. ATEX Zones 1 & 2: Ex II 2 G Ex mb IIC T4 Gb, Ex II 2 D Ex mb IIIC T135°C Db

### PERFORMANCE:

<b>Accuracy:</b>	±2mm (0.08in)
<b>Repeatability:</b>	±1mm (0.04in)
<b>Resolution:</b>	±1mm (0.04in)
<b>Near blanking distance:</b>	77mm (3.03in) from the drip shield

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

*Literature No. mmWave-Radar-D-0818  
Copyright © 2018. Pulsar Process Measurement Ltd.*

[www.pulsar-pm.com](http://www.pulsar-pm.com)

Pulsar Process  
Measurement Ltd.  
Cardinal Building  
Enigma Commercial Centre  
Sandy's Road  
Malvern  
WR14 1JJ  
UK  
Tel: +44 (0) 1684 891371  
Email: [info@pulsar-pm.com](mailto:info@pulsar-pm.com)

Pulsar Process  
Measurement Inc.  
P.O. Box 5177  
4565 Commercial Drive  
Suite 105  
Niceville  
FL 32578  
USA  
Tel: +1 850 279 4882  
Email: [info.usa@pulsar-pm.com](mailto:info.usa@pulsar-pm.com)