

IMP+

Ultrasonic Level Sensor

IMP+ can be used wherever you need reliable non-contacting ultrasonic level measurement and digital echo processing means IMP+ is perfect for slurries or liquids and anywhere you need a display telling you the level, or an analogue output to interface with your site control system or drive a display.

There is an IMP+ to suit your application, 3m, 6m and 10m range versions are available and each can be wired for 2-wire and 3-wire operation. IMP+ features a LCD display and digital temperature measurement and compensation. IMP+ also has 2 relay outputs as standard.

Level

Volume



Technical Specification:

PHYSICAL:

Dimensions:	186mm \varnothing height x 133mm \varnothing diameter (5.24 x 7.32in)
Cable entry:	2 off cable glands 4.5 -10mm (Torque to 2NM)
Mounting:	1.5" BSP/NPT (IMP3 & IMP6), 2" BSP/NPT (IMP10)
Weight:	Nominal 1kg (2.2lb)

VARIANTS:

Model:	Measurement range:	Operating frequency:	Beam angle (-3dB half power):
IMP3	0.2 - 3m (0.66 - 10ft)	125kHz	<10° inclusive
IMP6	0.3 - 6m (0.98 - 20ft)	75kHz	<10° inclusive
IMP10	0.3 - 10m (0.98 - 33ft)	41kHz	<10° inclusive

ENVIRONMENTAL:

Enclosure protection:	IP67
Max. and min. temperature (ambient):	-40°C to +65°C (-40°F to +149°F)
Max. and min. temperature (process):	-40°C to +80°C (-40°F to +176°F)

APPROVALS:

CE approval:	Listed in the Certificate of Conformity within the manual
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PERFORMANCE:

Input voltage range:	11-30V, 3.5-22mA
Accuracy:	$\pm 0.25\%$ or 6mm (0.24in) whichever is greater
Resolution:	$\pm 0.1\%$ or 2mm (0.08in) whichever is greater
4-20mA outputs:	Resolution 5 μ A (both active and passive outputs)
Temperature compensation:	Via internal temperature sensor ($\pm 0.5^\circ\text{C}$ accuracy). Level and volume conversion are installed allowing linearisation for tank shapes.
PC Interface:	All parameters can be accessed and changed through PC Suite software . Echo traces may be viewed on screen.

2-WIRE CONFIGURATION FEATURES:

RS232 (RJ11 port) connection for diagnostics and software updates
4 digit LCD display
4 button keypad for parameter entry
Power consumption: 3.5 - 22mA
Passive 4-20mA output

3-WIRE CONFIGURATION FEATURES:

All 2-wire version features plus:
Backlit LCD display
0-10V analogue output
2 relays: single pole two way, 1A 30VDC/AC
Power consumption with relays energised <60mA (less 12mA/relay not energised)
Active and passive 4-20mA outputs

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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