

## IMP+

Self-contained, ultrasonic level measurement without compromise.

**The IMP series is a range of compact, low-profile, self-contained units with the benefit of digital echo processing.**

There is an IMP unit to suit your application. 3 m (9.8 ft), 6 m (19.7 ft), and 10 m (32.8 ft) range versions are available and each can be wired for 2 wire or 3 wire operation. The IMP+ features an LCD display and digital temperature measurement and compensation with 2 relay outputs as standard.

### **Where Can I Use the IMP+?**

The IMP+ can be used wherever you need a reliable, non-contacting level measurement, and digital echo processing means IMP+ is perfect for solids or liquids it can be installed in sumps, tanks, silos, or anywhere you need a display telling you the level, or analog output to interface with your site control system or drive a display.

### **Battery Power**

When used on battery power for intermittent (wake-up) applications, the IMP+ features a high-speed boot up of around circa 3 seconds which maximizes battery life. For example, if an IMP were switched on every 15 minutes for a 3-second reading, the average current is a mere 40µA.

### **System Integration**

Active and passive (sourcing and sinking) analog outputs assist with system integration, especially when retrofitting into older installations.



## THE RIGHT METER FOR

- Tank Level Applications
- Chemical Dosing
- Simple Level Indication
- Open & Closed Vessel Level Requirements
- Solids Level Indication

### **Simple to Install**

The compact IMP+ is only 175 mm (6 in) high with a 130 mm (5.1 in) diameter. Cable glands are provided and IMP+ can be simply screwed into a 1.5" or 2" universal fitting (a 1.5" or 2" adapter is available). High transducer power and tight beam angles, together with Pulsar Measurement's digital echo processing, makes IMP+ ideal for many "difficult" applications such as dusty or foamy environments, or where a tank has unavoidable intrusions.



## Technical Specifications

### PHYSICAL

<b>Controller Body Dimensions:</b>	186 mm H x 133 mm D (5.2 in x 7.3 in)
<b>Weight:</b>	Nominal 1 kg (2.2 lb)
<b>Cable Entry Detail:</b>	2 off cable glands 4.5 mm to 10 mm (Torque to 2NM)
<b>Mounting:</b>	1.5 in BSP/NPT (IMP3 & IMP6), 2 in BSP/NPT (IMP10)

### ENVIRONMENTAL

<b>IP Rating:</b>	IP67
<b>Temp. Range (Process):</b>	-40 °C to +80 °C (-40 °F to +176 °F)
<b>Temp. Range (Ambient):</b>	-20 °C to +65 °C (-4 °F to +149 °F)

### IMP3

<b>Beam Angle (-3dB Half Power):</b>	<10° inclusive
<b>Operating Frequency:</b>	125 kHz
<b>Measurement Range:</b>	200 mm to 3 m (7.9 in to 9.8 ft)

### IMP6

<b>Beam Angle (-3dB Half Power):</b>	<10° inclusive
<b>Operating Frequency:</b>	75 kHz
<b>Measurement Range:</b>	300 mm to 6 m (11.8 in to 19.7 ft)

### IMP10

<b>Beam Angle (-3dB Half Power):</b>	<10° inclusive
<b>Operating Frequency:</b>	41 kHz
<b>Measurement Range:</b>	300 mm to 10 m (11.8 in to 32.8 ft)

### APPROVALS

<b>CE Approval:</b>	Listed in the Certificate of Conformity within the manual
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### PERFORMANCE

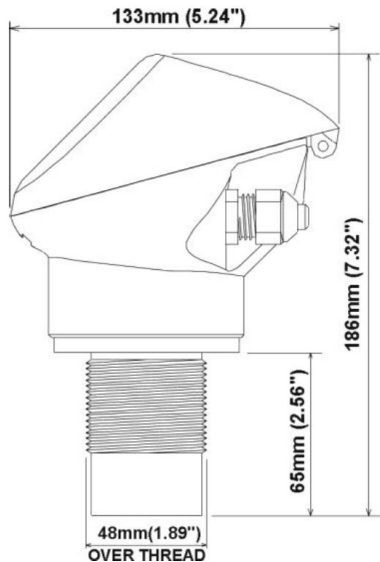
<b>Input Voltage:</b>	11-30 V, 3.5-22mA
<b>Accuracy:</b>	±0.25% or 6 mm (0.2 in), whichever is greater
<b>Resolution:</b>	± 0.1% or 2 mm (0.08 in), whichever is greater
<b>4-20mA Outputs:</b>	Resolution 5 µA, both active and passive outputs
<b>Temperature Compensation:</b>	Via internal temperature sensor (±0.5 °C (32.9 °F) accuracy). Level and volume conversion are installed allowing linearization for tank shapes
<b>PC Interface-PC Suite:</b>	All parameters can be accessed and changed through PC Suite software. Echo traces may be viewed on-screen.

## 2 WIRE CONFIGURATION FEATURES

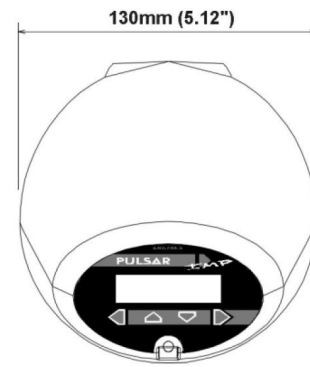
- RS232 (RJ11 port) connection for diagnostics and software updates
- 4 Digit LCD display
- 4 button keypad for parameter entry
- Power consumption: 3.5-22mA
- Passive 4-20mA output

## 3 WIRE CONFIGURATION FEATURES

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



IMP drawing side



IMP drawing top

## 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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