pulsar
MEASUREMENT

FLOWPULSE HANDHELD CONTROLLER

Non-invasive flow monitoring on the move

Designed for the FlowPulse sensor, directly providing instant feedback on flow monitoring and pump performance.

FlowPulse Handheld Controller is an indispensable tool for portable flow monitoring and data acquisition. The unit connects to pre-installed FlowPulse sensors or operates as a self-contained kit, with instant feedback via its color screen. For true portability, the Handheld Controller will power a FlowPulse sensor directly, monitoring flow rate to assess system or pump performance.

Read & Store Instantaneous Flow Rate

Pulsar Measurement's Handheld controller detects the FlowPulse sensor when the on-board RS-485 line is connected, auto loads operating parameters, and reads the instantaneous flow rate. The color screen and simple programming allow the operator to view traces and recorded data files as well as loading and saving parameter files. The ergonomically designed Handheld is rated at IP65.

Data Logging & Functionality

With 3.8GB of onboard memory, the Handheld provides storage for nearly a year's worth of data (around 120 days worth of flow traces) at 10-second recording intervals. The sleep/wake function allows for extended logging, with data downloaded via USB to Pulsar FlowPulse PC software and .csv file for further analysis.

THE RIGHT METER FOR

- Identify Inefficient Pumps & Under-performing Assets
- Identify Faulty Non-return Valves
- Record Flow for Analysis & Comparison
- Monitor Pump System Performance

Options & Features

The FlowPulse Handheld Controller is available as a standalone unit to use with existing FlowPulse sensors or can be purchased as a complete kit with FlowPulse and a convenient carry case. The unit is mains or battery operated and even comes with an in-car charger for your convenience.

FlowPulse PC Software

To accompany the FlowPulse sensor and various package options, the FlowPulse PC software has been designed to allow users to be able to control, set up, and monitor FlowPulse and it's performance.

Using this platform, users can see at a glance the flow rate in units of their choice. Signal strength and confidence level can be monitored throughout the application, and the raw signal can be displayed. The RS232 Modbus RTU connection allows the FlowPulse to the set up through an intuitive and straightforward set of parameters, while real-time flow information can be read and recorded.

FlowPulse is simple to set up. All that is required once FlowPulse is in position and powered is to provide the internal diameter of the pipe. Other simple parameters can be configured to allow for user-defined options such as the metrics of measurement including flow and time units to be displayed.

'Signal Strength' is a measurement of the total strength of the returning echoes from the interior of the pipe. 'Confidence' is, as the term suggests, a measurement of how sure FlowPulse is of the measurement and is an indication of the consistency of the flow rate. Confidence will increase the longer that FlowPulse is installed.

FlowPulse PC Software is free-issued with FlowPulse and requires no further licensing or equipment to run, other than the RS232 cable - available from Pulsar Measurement if required.
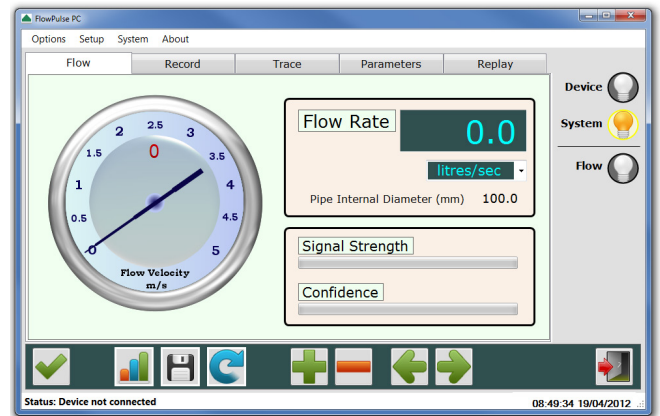
FlowPulse PC Software Flow Rate Screen

FlowPulse PC Software Flow Trend Screen

Service & *Installation*

Our award-winning products are favored worldwide due to their reliability and easy menu-driven set-up.
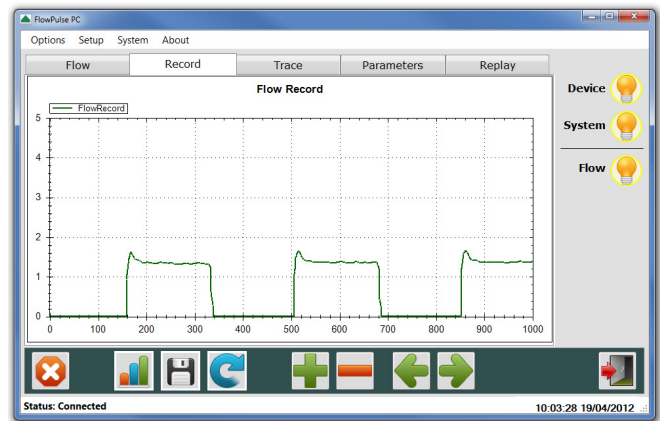
All products from Pulsar Measurement are designed to be easily installed and set up, but if you are unsure of your installation, our service engineers are ready to assist you. From telephone and web support to onsite commissioning and on/off-site product training, we will ensure that you get the most out of your product and sales experience with Pulsar Measurement.

If you are unsure of your application requirements or which product is right for you, our technical teams can advise you on the best solution to your application and technology requirements, making sure that you get the most accurate and reliable readings every time.

For more information on our service offerings, please visit the website or contact one of our head offices.

Technical Specifications

PHYSICAL

Controller Body Dimensions:	210 mm x 125 mm x 50 mm (8.3 in x 4.9 in x 2 in)
Weight:	Nominal 0.6 kg (1.3 lb)
Enclosure Material/ Description:	Polycarbonate UL94 V2 rated, with weather-proof connectors
Screen:	3.2 in TFT LCD
Supplied Cable Length:	2 m (9.8 ft) minimum

ENVIRONMENTAL

IP Rating:	IP65 (Enclosure and Connectors Protection)
Max. & Min. Temperature (Electronics):	-20 °C to +60 °C (-4 °F to +140 °F)
Max. & Min. Temperature (Battery Charging):	-20 °C to +40 °C (-4 °F to +104 °F)
CE Approval:	Listed in the Certificate of Conformity within the manual

PERFORMANCE

Accuracy:	±0.25% of the measured range or 6 mm (0.2 in), whichever is greater ±2 mm (0.01 in) for dBR16 mmWAVE RADAR
Resolution:	±0.1% of the measured range or 2 mm (0.08 in), whichever is greater
Max Range:	Dependent on application and transducer, maximum 40 m (131.2 ft) dB40
Min Range:	Dependent on application and transducer, minimum zero dBMACH 3
Rate Response:	Fully Adjustable

DATA LOGGING

Storage Media:	Internal flash memory
Storage Capacity:	• 3.8 GB, 3.2 million entry without trace • 800,000 entries with trace
Storage Format:	PC files
Storage Access:	File transfer to PC via USB — no driver required

OUTPUTS

Analog Output:	Not available
Digital Output:	Half Duplex RS485 to sensor, USB connection to PC for file transfer

PROGRAMMING
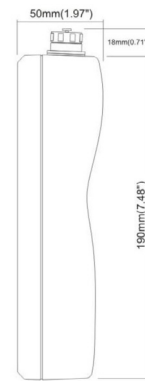
Programmed Parameter Integrity:	Via non-volatile RAM

SUPPLY

Rechargeable Battery:	11.1 V DC Li-ion cells
Battery Duration:	4 to 5 hours
Charging Methods:	Mains charger, 12 V DC at 2 A. In-car charger
Power Supply:	12-18 V DC
Power Consumption:	• 3.5 W at 12 V not charging, • 15 W at 12 V when charging

FlowPulse Handheld Controller Front Drawing

FlowPulse Handheld Side Drawing

Delivering the Measure of Possibility

Pulsar Measurement offers worldwide professional support for all of our products, and our newtork 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 allow 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