pulsar MEASUREMENT

All Products Measurement Solutions

Delivering the Measure of Possibility

Order Processing

How to get a quote

To request a quotation, please contact your regional Pulsar Measurement contact sales team. Alternatively, you can use the below shared mailboxes depending on your location:

europe@pulsarmeasurement.com
northamerica@pulsarmeasurement.com
asiapacific@pulsarmeasurement.com
oceania@pulsarmeasurement.com

In order for us to provide you with the correct information, please provide the following within your request:

1. Name of required product(s)
2. Corresponding product(s) part number
3. Quantity required for each product
4. Brief description of the application including the measurement range
   All quotes are usually completed and sent within 24 hours.

How to place an order

For all sales orders, you should contact your regional Pulsar Measurement sales team.

Please have the following details ready before placing an order:

1. Quote number is applicable
2. Name of required product(s)
3. Corresponding product(s) part number
4. Quantity required for each product
5. Brief description of the application
6. Delivery address
7. Any post-delivery activities required

pulsar MEASUREMENT

Pulsar Measurement is a trading name of Pulsar Process Measurement, Ltd.

Clamp-on, Ultrasonic Flow Meters

- Measures flow from outside the pipe
- No shutdown or downtime to install
- Easy to install & configure
- No contact with process fluids
- No wear & tear
- Price of meter is independent of pipe size
- Certificate of calibration included
- Permanent or portable versions available

TTFM 6.1
Transit-Time Flow Meter

Key Features

- Non-invasive flow measurement of "clean" fluids like water & chemicals
- Three sizes of transducers to measure 15 mm to 1,200 mm (0.5 in to 48 in) pipes, intuitive 5 button interface for easy installation & set-up
- 4-20mA, relays, HART, Modbus outputs

Common Applications

- Treated water
- Raw water
- Cooling water
- Chemicals
- DI/RO water

DFM 6.1
Doppler Flow Meter

Key Features

- Non-invasive flow measurement of "complex" fluids with suspended solids or entrained air
- Single transducer; no flow meter is easier to install and set up
- 4-20 mA, relays, HART, Modbus outputs

Common Applications

- Sewage
- Sludge – RAS & WAS
- Slurries
- Oil production
- Pulp stock & liquors

PTFM 6.1
Portable Transit-Time Flow Meter

Key Features

- Portable non-invasive flow measurement of "clean" fluids like water & chemicals
- Flow verification is easy and inexpensive with three transducers that cover wide range of pipe sizes and materials
- Rugged IP67 design, powerful signal processing, and easy to use

Common Applications

- Treated water
- Raw water
- Cooling water
- Chemicals
- RO/DI water

PDFM 5.1
Portable Doppler Flow Meter

Key Features

- Portable non-invasive flow measurement of "complex" fluids
- Flow verification is easy and inexpensive with one transducer that covers wide range of pipe sizes and materials
- Deploy as a logger for weeks or as continuous meter while inline flow meter is out of service

Common Applications

- Sewage
- Sludge – RAS & WAS
- Slurries
- Oil production
- Pulp stock & liquors

MEASUREMENT TYPE LEGEND

- Differential level
- Flow
- Flow with PMD
- Level
- MCERTS Certified
- Open channel flow
- Partially filled pipe flow
- Process protection
- Pump control
- Sand in oil
- Sludge blanket
- Thermal Gas
- Volume

Area-Velocity Flow Meters for Partial Pipe or Open Channel

- Accurately measure flow in partially filled pipe & channels without a flume or weir
- Easy to install & configure
- Non-contacting & contacting solutions
- Permanent or portable versions available
- Solutions for small, large channels & streams

AVFM 6.1
Area-Velocity Flow Meter

Key Features

- Measure flow in partially filled pipes or channels without a flume or weir
- Multivariable sensing of velocity, level and temperature
- Easily configured for common channel shapes & sizes
- No moving parts and little to no maintenance
- Three 4-20 mA outputs, relays and Modbus

Common Applications

- Municipal wastewater
- Industrial wastewater
- Stormwater
- Combined sewers
- Natural streams
- Irrigation

MANTARAY
Portable, Area-Velocity Flow Meter

Key Features

- Portable flow measurement of partially filled pipes & channels without a flume or weir
- Deploy as a logger to gather data over weeks
- Extend logging sessions with external battery connection
- Rechargeable battery for continuous use without external power source

Common Applications

- Municipal sewers
- Industrial sewers
- Stormwater
- Infiltration & Inflow studies
- Natural streams
- Irrigation

FLOWCERT, MICROFLOW, & dBMACH3
Non-contacting, Area-Velocity Flow Monitoring

Key Features

- 1-year log at 10-minute intervals
- Modbus RTU & Profibus options
- Can be used stand-alone or as part of a complete flow meter system
- Non-contacting so no interruption to process
- Minimal installation costs & maintenance-free
- Accuracy maximized at zero blanking distance
- Solar radiation protection for utilization of internal temperature & enhanced reliability
- For channels over 1.2 m (3.9 ft) wide use multiple MicroFlow sensors with the Ultimate Controller
- ATEX approval

Common Applications

- Open channels with no PMD
- Influent / effluent flow monitoring
- Water & wastewater
- Quarry & mining
- Stormwater
- Irrigation
- Pipe flow & open channel flow monitoring
- Groundwater monitoring
- Streams, rivers level, velocity, & flow

Open Channel Flow Meters for PMD

- Standard flumes, weirs, & custom PMD
- Easy to install & configure
- World leading accuracy independently certified
- Maintenance-free

ULTRA 4 & dBMACH3 OR dB3 WITH DOUBLE SUN SHIELD

Advanced Flow, Level, Volume, & Pump Control

Key Features

- Multi-function display for easy setup & configuration
- On-screen monitoring with echo profiles & trend graphs
- Built-in volume calculations from standard tank shapes or calibration curves
- Onboard Micro SD card extends data logging
- Operates with all dB & dBR transducers
- Accuracy maximized at zero blanking distance
- Solar radiation protection for utilization of internal temperature & enhanced reliability
- ATEX, cFMus approvals
- MCERTS certified

Common Applications

- Open channel flow & level
- Wastewater & industrial effluent
- Stormwater
- Irrigation
- Flow monitoring
- Groundwater monitoring

OCF 6.1

Open Channel Flow & Tank Level Meter

Key Features

- Accurate, reliable, non-contacting flow measurement in partially filled pipes & channels where a flume or weir is installed
- Ultrasonic level is easy to install above the fluid, & free of maintenance
- Get the data you need with standard analog output, & a 26 million point data logger with free software for easy report generation

Common Applications

- Municipal influent & effluent
- Industrial effluent
- Stormwater
- Natural streams
- Irrigation

Sludge Blanket Interface

- Continuous sludge blanket level
- Easy to install
- Maintenance-free
- Replaces unreliable manual techniques
- Detect sludge in clarifiers, primary, secondary, & tertiary settlement tanks
- For use with stationary or traveling bridges
- Used for compliance & process efficiency

SLUDGE FINDER 2 & VIPER TRANSDUCER

Sludge Blanket Level Detector

Key Features

- Continuous single or dual-channel level control
- High frequency gives high-reliability long term
- Self-cleaning transducer; no need for regular inspection
- Easy set up with drop-down menu on large, clear display
- High level FLOC alarm available
- Optional ultrasonic transducer can be added

Common Applications

- Primary & secondary settlement tanks
- DAF thickeners
- Gravity thickeners
- Stationary & traveling bridges

Level, Volume Measurement & Pump Control

- From loop powered level control through to intelligent pump control
- Non-contacting
- Both radar and ultrasonic technologies
- Maintenance-free
- Low power level solutions

REFLECT™
2-Wire Radar Level Sensors

Key Features

- 2-wire, 4-20mA output, FMCW radar technology
- Available in 8 and 20 meter measurement ranges
- ±2mm measurement accuracy and 6° beam angle
- Easy installation using **REFLECT***TILT*™ LED indicators and **BReez**™ mounting adapter
- Embedded DATEM software for repeatable measurement in the most challenging environments
- Intuitive and user-friendly Bluetooth interface for configuration
- User-definable Bluetooth range with secure browser-based app
- Communicates with FDT framework applications via Device Type Manager (DTM)
- ATEX approval as standard
- HART communication

Common Applications

- Applications needing high accuracy
- High electrical or acoustic noise applications
- Turbulent applications with foam
- Dosing Plants & IBC's
- Digesters

dBi INTELLIGENT TRANSDUCERS
Non-contacting Intelligent Ultrasonic Transducers

Key Features

- 2 wire, loop-powered, 4-20mA output
- Strong signal to noise ratio & excellent resolution
- Proprietary echo processing technology (DATEM) for greater measurement accuracy
- Communicates with FDT framework applications via Device Type Manager (DTM)
- Narrow beam angle for tight line of sight
- Range up to 15 m (49.2 ft)
- ATEX & cFMus approvals
- Choice of HART, Modbus, & Profibus communication

Common Applications

- Liquids & solids measurement
- Level & volume measurement
- Remote level monitoring
- Tank level monitoring
- Event duration management

Level, Volume Measurement & Pump Control (cont.)

- Controllers work with all dB & dBR transducers
- From loop powered level control through to intelligent pump control
- Low power level solutions
- Ease of use
- Various mounting options available

dB TRANSDUCER SERIES
Non-contacting Ultrasonic Sensors

Key Features

- Proprietary echo processing technology (DATEM) for greater measurement accuracy
- Strong signal to noise ratio & excellent resolution
- Integral temperature compensation
- Narrow beam angle for tight line of sight
- Cable extensions up to 1,000 m (3,281 ft)
- Range up to 40 m (131.2 ft)
- ATEX & cFMus approvals

Common Applications

- Wet well level measurement
- Tank level measurement
- Silo level measurement
- Pump control applications
- Shaft tank monitoring
- Digester levels

IMP RANGE
Compact, Loop-powered Ultrasonic Measurement

Key Features

- Combined transducer & controller
- Range up to 10 m (32.8 ft)
- Calibrate without compromising the IP67 rating
- Simple, menu-led setup using built-in display & keypad
- High power & narrow beam angles for accurate & reliable level measurement
- ATEX option

Common Applications

- Tank level applications
- Chemical dosing
- Simple level indication
- Open & closed vessel level requirements
- Solids level indication

dBR RADAR SERIES
Non-contacting Radar Sensors

Key Features

- Perfect for applications with changing atmospheric conditions or heavy vapors or fumes
- Strong signal to noise ratio & excellent resolution
- Extremely low power consumption
- Minimal installation costs with no interruption to service
- Narrow beam angle
- Dynamically tracks level with proprietary echo processing technology (DATEM)
- Range up to 16 m (52.5 ft)
- Maintenance-free
- ATEX approved

Common Applications

- Foamy applications
- Application's subject to high electrical noise
- Atmospherically volatile applications
- Chemical dosing plants & IBCs
- Digester level monitoring

ULTRA 4
Advanced Ultrasonic Level, Flow, Volume, & Pump Control

Key Features

- Multi-function display for easy setup & configuration
- On screen monitoring with echo profiles and trend graphs
- Built-in volume calculations from standard tank shapes or calibration curves
- On-board Micro SD card extends data logging
- Operates with all dB & dBR transducers up to 40 m (131.2 ft) range

Common Applications

- Pump control
- Open channel flow & level
- Chemical dosing
- IBC tank level
- Storage tank levels
- CSO & sewer network monitoring

Level, Volume Measurement & Pump Control (cont.)

- From loop powered level control through to intelligent pump control
- Low power level solutions
- Ease of use
- Various mounting options available
- Additional sensor inputs

ULTRA TWIN
Twin-Channel, Ultrasonic Measurement

Key Features

- Dual display for two measurements
- Easy prompt-led setup
- Data logging option which records & charts data & trends in an easily accessible form
- Operates with all dB & dBR transducers up to 40 m (131.2 ft) range

Common Applications

- Effluent discharge monitoring
- Shaft tank dual-chamber measurement
- Dual channel monitoring
- Screen house monitoring
- Sophisticated pump control

ULTRA 5
Non-contacting Level, Flow, Volume, Differential, & Pump Control

Key Features

- Quick & easy set-up with onboard, menu driven software tool
- Pre-programmed tank shapes
- 5 assignable relays with extra alarm options such as pump efficiency
- Optional data logging board to enable the user to log data for the lifetime of the product
- Operates with all dB & dBR transducers up to 40 m (131.2 ft) range

Common Applications

- Solid & liquid tank level monitoring
- Differential level control
- Well level measurement
- Pump control & exercising
- Open channel flow measurement with flumes & weirs

BLACKBOX 130
Simple Level Measurement

Key Features

- Compact, low-cost, intelligent controller
- Integrated keypad & display for complete flexibility
- Local programming provides instant level indication
- Solids, powders, & liquid applications
- Operates with all dB & dBR transducers up to 40 m (131.2 ft) range

Common Applications

- Tank level monitoring
- Silo level monitoring
- Simple level indication
- Stock control
- Compliance with health & safety
- Process automation

ZENITH
Intelligent Pumping Station Controller

Key Features

- Advanced pump control features as standard
- Reduce capital costs by eliminating PLC's on small sites
- Reduce power costs by intelligent use of lower tariff periods for pumping
- Monitoring of pumps or controls via the 7 digital inputs
- Totalizer volume throughput of well or station
- Operates with all dB & dBR transducers up to 40 m (131.2 ft) range

Common Applications

- Small pump station control
- Tariff change monitoring
- Energy savings
- Well monitoring
- Pump control & monitoring
- Well capacity & performance

Level, Volume Measurement & Pump Control (cont.)

- Controllers work with all dB & dBR transducers
- From loop powered level control through to intelligent pump control
- Low power level solutions
- Ease of use
- Various mounting options available

QUANTUM 3
Pumping Station Controller

Key Features

- 'Time to spill' alarm used in high-risk areas, to aid site management
- Able to supply power to 4 FlowPulse units so all flow-rate based alarms & control are based on real measurements
- Pump efficiency alarm function & peak power tariff avoidance
- Totalizer sums real throughput rather than deriving from level measurement
- Storm detection & NRV leakage alarms
- Operates with all dB & dBR transducers up to 40 m (131.2 ft) range

Common Applications

- Pump control
- 'Time to Spill' warning requirements
- Reduction in power costs
- Pump monitoring & control
- Pump station control

PSL 5.0
Hybrid, Pump Station Level Controller

Key Features

- Hybrid pump control with accurate & reliable ultrasonic level sensor plus redundant level input from submersible sensor
- Six relay outputs programmable for pump alternation
- Pump run-time reports

Common Applications

- Pump stations
- Tank level control

ULTIMATE CONTROLLER
Combines Ultrasonic Level & Flow Measurement

Key Features

- Modular & expandable controller platform
- Provides cost savings through:
  - High-energy cost avoidance
  - Pre-blockage detection
  - Automatic resets
  - Selection of the most efficient pump
- Camera port for real-time viewing of your application
- Touchscreen display
- Operates with all dB & dBR transducers up to 40 m (131.2 ft) range

Common Applications

- Advanced pump control
- Level measurement
- Flow monitoring
- Pump performance monitoring
- Asset management

Process Protection Solutions

- Save cost: through shutdown prevention & equipment protection
- Solid & liquid flow indication
- Non-invasive
- Maintenance-free
- Trend analysis

DFS 5.1
Doppler Flow Switch

Key Features

- Inexpensive & non-invasive flow switch for "difficult" to measure fluids like sewage, sludge, & slurries
- Protect expensive equipment from failure or damage
- Clamp-on ultrasonic sensor installs in minutes without system shutdown & is maintenance-free

Common Applications

- Sewage
- Sludge – RAS & WAS
- Slurries
- Oil production
- Pulp stock & liquors

FLOWPULSE SENSOR
Non-invasive, Clamp-on, Flow Sensor

Key Features

- Non-invasive for simple & cost-effective installation
- Onboard digital signal processing for exceptional repeatability
- Ultrasound can be fired through a variety of pipe walls
- Digital platform offers robust performance, repeatability & flexibility

Common Applications

- Pipe flow monitoring
- Influent pipe flow
- Process effluent
- Leachate pipe monitoring
- Pump / process efficiency & asset monitoring

PULSARGUARD 2010
Acoustic Sensor for Non-invasive Solids Flow Detection

Key Features

- Non-invasive, therefore, no interruption to service
- Highly resistant to interference from machinery or process noise
- Compact design for fitting in the tightest of positions or environments
- No moving parts & vibration resistant
- Highly reliable in low or high temperature
- Hazardous options available

Common Applications

- Burst filter bag detection
- Blockage detection
- Pump cavitation
- Valve leakage detection
- Bearing failures
- Bridging or rat-holing in silos
- Pig Detection

Thermal Mass Flow Measurement for Gas

- Advanced gas flow measurement for the water and wastewater industry
- Measures gas flow directly – no need for multiple measurements and a flow computer
- Industry leading turndown
- In-situ calibration validation
- Global hazardous location approvals

MDot

Insertion or Inline Thermal Mass Flow Meter

Key Features

- Thermal mass technology – measures gas flow directly
- Available as insertion or inline
- Inline meters feature built-in flow conditioner for better performance in reduced straight run
- Up to 1000:1 turndown
- MDot GasSelect™ - Modify gas composition without recalibration
- MDot Cal™ - In-situ calibration validation
- Standard 4-20mA and pulse outputs
- Optional Modbus RTU or HART outputs

Common Applications

- Aeration basins/tank
- Digester and Biogas
- Cogeneration systems
- Methane makeup for cogen systems

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.

By taking a step forward in echo processing technology, Pulsar Measurement addresses applications previously thought to be beyond the scope of ultrasonic measurement. This technology improves signal processing at the transducer head which has made it possible to increase resistance to electrical noise, enabling the transducer to 'zone in' on the true echo.

For more information, please visit our website:

www.pulsarmeasurement.com

pulsar MEASUREMENT

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