

Non-invasive, in-line process material measurement

The Ultimo Density Meter is a non-invasive technology and meter that continuously measures the density of any slurry, loose solid or liquid.

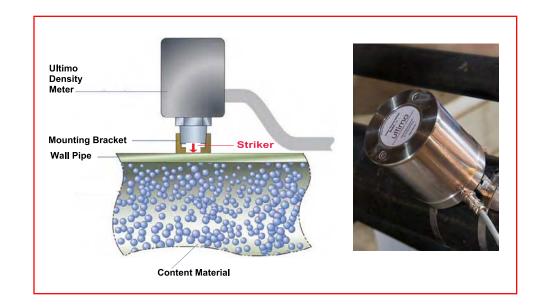












Measurement Principle

Ultimo's proprietary vibration-based Percussion technology generates, acquires and analyzes oscillations at the pipe wall to measure the density of the material inside. Self-learning software discriminates between valuable and ambient vibrations. Ultimo's proprietary state-of-the-art algorithms provide exceptionally precise measurements.

Finally an Alternative to Nuclear

Ultimo is the only producer of non-invasive Percussion-based technology worldwide. Years in development and field tested on five continents Percussion technology is the method of choice for abrasive, caustic, and high solids content material.





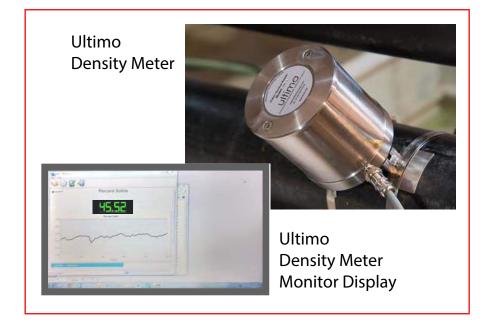
No radiation

Real-time process measurement

Install on any pipe

Non-invasive

Made in the USA



Advantages of Non-invasive measurement with Ultimo's Patented Percussion technology

- No clogging, leaks or pressure loss
- Fits all standard sized pipes metal or plastic
- Installs in minutes without process interruption
- · Interactive installation wizard
- Accurate and repeatable across all flow rates and density ranges
- Unaffected by system vibrations
- % solids measurement
- No routine maintenance

Benefits

- · Eliminates the administrative burden of nuclear
- Safer for the Operator and the Plant
- · Expand valuable points of measurement
- 24/7 reliability
- · Read density, trend or deviation
- Lowers cost without compromise
- Made in the USA
- Mass Flow calculation
- Auto Tuning



Technical Specifications

Power 110/220 VAC

Output: Analog: 4-20 mA current loop

Digital: ModBus RTU (on RS 485) 20A Relay Contact @ 110/220 VAC

Modules IP 66 or NEMA 4X / stainless steel

Install anywhere

Non-invasive

No radiation

Inline density measurement

Ultimo Measurement, LLC is a privately held industrial process control technology development company dedicated to inline, real-time, non-invasive measurements using our proprietary Percussion technology. Years in development and field tested on five continents by a dedicated, global team of experts in their field and the support and input by some of the leading process control instrumentation companies.

Our first products allow process manufacturers to avoid using nuclear radiation and invasive methods to make online density measurements. These and future products will allow process manufacturers to further optimize their operations by being able to make other high precision, high accuracy critical measurements automatically, online and in real-time.





Useful Features

- · Analog, digital and relay outputs
- Fail safe functionality
- · Self-guided User Interface
- Auto Tuning
- · Multiple calibration methods





Non-invasive



No nuclear radiation



Material Being Measured	Process Conditions	Process Pipe Limitations
Only for:	Process pressure	Pipe wall thickness
Slurries/loose solids/liquids	Any	No practical limit
Types of Measurements Density, % solids	Flow rate No practical limit	Pipe Size: 3 inches plus
Process temperature: Up to 250° C	Ambient temperature	Pipe Wall Material: Any
Particle size: No practical limits	System vibration: Accomodated	Liners All are OK

Applications

- Precious metal and mineral processing/beneficiation
- Specialty Chemicals
- Pulp & Paper
- Energy
 - Fracking
 - Coal-fired power plants
- Dredging