



Pioneering Connected Process Technology



Established in 1998, Labtech Electronics Private Limited is a premier manufacturer based in Chennai, India. We pride ourselves on being a one-stop shop for our clients, offering unmatched reliability and outstanding value through multiple locations and facilities.

Our strength lies in our customer-focused approach, expanded infrastructure, technical partnerships, and strategic alliances with leading multinational companies. We are particularly strong in Wireless communications.

Our Mission & Industry Applications

Our Mission

- Deliver high-quality products and services exactly when customers need them
- Continually develop our ability to meet new and existing technical challenges
- Consistently increase our product and service standards
- Provide quality products at reasonable prices
- Extend our product and service reach to all potential clients

- Research Institutions
- Industrial Control
- Power Plants
- Vehicle Industry
- Process Industries
- Oil & Gas
- Water Treatment
- Utilities
- Boiler & Petrochemical
- Environmental Protection
- Agriculture
- Chemical Industry
- Food & Beverages
- Feed Industry
- Pharmaceutical
- Cement Industry



Comprehensive Product Portfolio

Labtech Electronics offers an extensive and diverse range of advanced measurement and control instruments, meticulously engineered for unparalleled precision, reliability, and efficiency across a multitude of industrial applications. Our cutting-edge portfolio includes:



Electromagnetic Flowmeters (PROFLOW Series)

Our PROFLOW Series is engineered for highly conductive liquids, delivering accurate and stable flow measurement in challenging industrial environments such as wastewater treatment, mining, and food processing.



Ultrasonic (ULTRAFLOW Series) & Vortex Flowmeters (STEAMTEX Series)

Providing versatile solutions for various fluid types, these meters ensure non-intrusive and precise flow measurement for diverse applications, including natural gas, steam, and high-purity liquids.



Mass Flow Meters (PROMASS Series)

Our PROMASS Series offers direct mass flow measurement for liquids and gases, ensuring extreme accuracy for critical applications in chemical, pharmaceutical, and oil & gas industries.



Turbine Flow Meters (PROTURB Series)

The PROTURB Series provides highly accurate volumetric flow measurement for low-viscosity liquids, ideal for applications in fuel dispensing, batch control, and potable water systems.



GAS Flow Meter (MICROMASS Thermal Series)

Specifically designed for precise measurement of gas flows, our Micromass Series offers exceptional sensitivity and accuracy for demanding industrial gas applications and leak detection.



Advanced Liquid Analysers (AC2000/AC3000/AC6000 Series)

Our Analysers provide real-time, accurate measurements of critical parameters like pH, conductivity, dissolved oxygen, turbidity, and chemical oxygen demand (COD/BOD/TSS/TOC) for water treatment, pharmaceuticals, and chemical processes.



Advanced Gas Analysers(AC5000/AC9000 Series)

Specialized instruments for continuous monitoring of gas composition, detecting trace elements, and ensuring safety in industrial processes, emission control, and environmental protection across various industries.



Level Sensors (PROLEVEL Series & IoT Solutions (CONNECT+))

Innovative level measurement devices integrated with IoT capabilities for remote monitoring, data analytics, and enhanced operational efficiency. Solutions include radar, ultrasonic, guided wave radar, and hydrostatic level transmitters for liquids and solids.



Field Instruments (PROEX Series)

A comprehensive range of robust and accurate field instruments, including pressure transmitters, temperature sensors, and process control valves, ensuring seamless integration and reliable data transmission across all control systems.

Electromagnetic Flowmeters (PROFLOW Series)

Key Features

- Designed for all conductive liquids
- Smart self-detection and self-diagnosis
- Checks magnetized signals, empty pipes, and contaminated electrodes
- Available in integral and remote types
- Backlit LCD with Flow Totalizer
- Starting price: Rs 20,000

Technical Specifications

- Meter Size: DN10 to DN3000
- Accuracy: +/- 0.1% or +/- 0.2%
- Protection: IP68 (default)
- Power Supply: 230V AC or 24V DC
- Outputs: 4-20mA HART, Pulse, RS485

Applications: Ideal for water distribution in process plants, cooling/heating water, water management, influent/effluent flows, wastewater, desalination. Specifically for STP, ETP, Dye & Chemical Industries, Paper mills, Mining.





Ultrasonic & Vortex Flowmeters



ULTRAFLOW Series

Available in Contact & Non-Contact types for clear liquids and gases

- New generation smart water meters with all-plastic design
- Battery operated with compact size
- Waterproof and can be immersed in water
- Clamp-on type allows installation without cutting pipes
- Models range from DN15 to DN6000



STEAMTEX Series

Measures volumetric flow based on the Karman Vortex street principle

- Backlit LCD Display with flow totalizer
- Outputs: 4-20mA HART, Pulse, RS485
- Inbuilt surge protection
- Ageing and vibration test certified
- Starting price: Rs 20,000

Applications: RO Plant, Water Treatment, Agriculture Irrigation, Garden Management, petroleum, chemical, metallurgical, thermal, textile, and paper industries. Ideal for measuring superheated steam, compressed air, general gases, and water.

Mass Flow Meters (MICROMASS Series)



Labtech Electronics offers advanced flow measurement solutions, featuring both high-precision Mass Flow Meters. Our Mass Flow Meters utilize sophisticated Coriolis technology for direct and highly accurate mass flow measurement across a wide range of fluids. For clean liquids, our Turbine Flow Meters provide robust and reliable volumetric flow measurement.

Mass Flow Meters (Coriolis Technology)

Leveraging the Coriolis effect, our mass flow meters deliver unparalleled accuracy and stability, essential for critical process applications. They inherently compensate for fluid density, temperature, and pressure variations, ensuring consistent and precise performance even in the most challenging industrial environments.



Direct & Unrivaled Accuracy

Our Coriolis mass flow meters provide direct mass flow measurement with exceptional accuracy, up to **+/- 0.1% of reading**. This advanced capability, combined with inherent compensation for variations in fluid density, temperature, and viscosity, ensures unparalleled precision and eliminates the need for external compensation devices. They are certified to meet international standards for custody transfer and process control.



Robust Design & Minimal Maintenance

Engineered with **no moving parts** inside the flow path, these meters offer superior long-term reliability and significantly reduced maintenance requirements, leading to lower operational costs. Their robust, all-welded construction from high-grade materials makes them ideal for demanding applications involving diverse liquids, gases, and even abrasive slurries.



Advanced Technical Specifications

Boasting a wide operating range from **-200°C to +400°C** and pressures up to **100 Bar**, our meters are built for extreme conditions. Wetted parts are exclusively **316L Stainless Steel**, ensuring chemical compatibility and durability. Standard outputs include **4-20mA with HART protocol, Modbus RTU/TCP, and configurable Pulse outputs** for seamless integration into any control system (DCS, PLC, SCADA).



Diverse & Critical Applications

Our Coriolis meters are essential for critical mass balancing in **chemical reactors**, precise ingredient blending in **food & beverage production**, accurate batching in **pharmaceutical manufacturing**, and custody transfer in **oil & gas pipelines**. They are broadly deployed across the **petrochemical, energy, and environmental industries** for enhanced process control and stringent quality assurance.



Turbine Flow Meters (PROTURB Series)

The PROTURB Series offers a cost-effective and highly accurate solution for volumetric flow measurement of clean, low-viscosity liquids. Known for their excellent repeatability and wide turndown ratio, these meters are a staple in various industrial segments.

Key Features

- **High Accuracy & Repeatability:** Achieves accuracy up to $\pm 0.5\%$ of reading with excellent long-term repeatability.
- **Wide Turndown Ratio:** Capable of accurately measuring flow across a broad operating range.
- **Low Pressure Drop:** Designed to minimize pressure loss across the meter, optimizing system efficiency.
- **Robust Construction:** Available in Stainless Steel or Bronze bodies with tungsten carbide bearings for extended life.
- **Pulse Output:** Provides a high-resolution frequency output directly proportional to flow rate, ideal for batching and totalization.
- **Easy Installation:** Compact design allows for straightforward in-line installation.

Technical Specifications

- **Meter Size:** DN15 to DN300 (0.5" to 12")
- **Accuracy:** $\pm 0.5\%$ of reading (standard), $\pm 0.2\%$ (optional)
- **Repeatability:** $\pm 0.05\%$
- **Process Temperature:** -40°C to $+150^{\circ}\text{C}$
- **Process Pressure:** Up to 63 Bar (913 PSI)
- **Wetted Materials:** 316L Stainless Steel, Tungsten Carbide
- **Outputs:** Pulse, 4-20mA (with transmitter), HART (optional)
- **Protection:** IP67 (standard), IP68 (optional)

Applications: Our PROTURB Turbine Flow Meters are widely used in sectors requiring precise measurement of clean liquids, including **water distribution and management**, **fuel consumption monitoring** in industrial engines, **petroleum refining**, **chemical processing**, **pharmaceutical manufacturing**, and **irrigation systems**. They are particularly effective for batch control, blending, and general volumetric flow measurement where high accuracy and repeatability are paramount.

GAS Flow Meter - MICROMASS Thermal Series

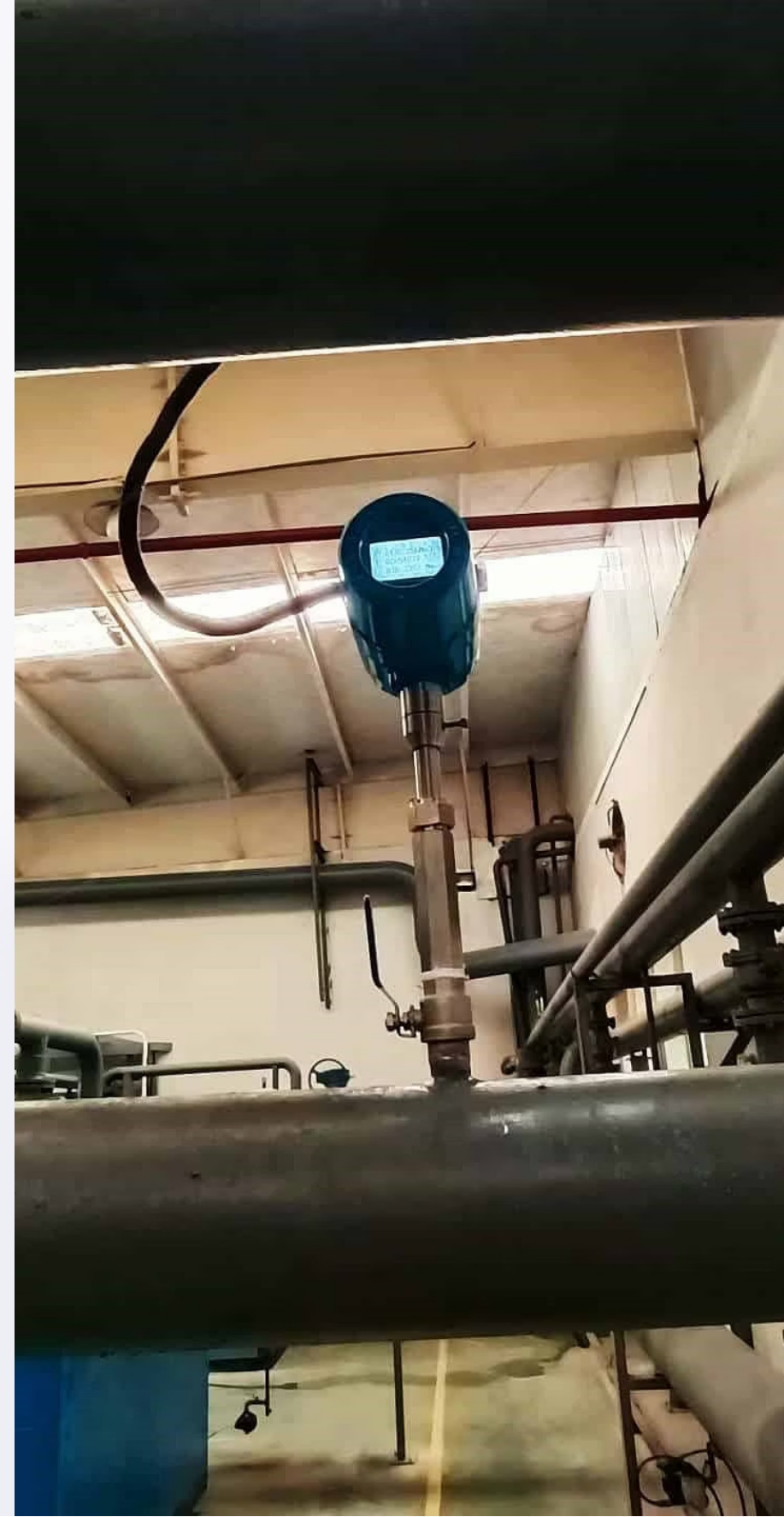
Our AIR/GAS Flow Meters are designed for precise and reliable measurement of air and various gases in industrial processes. These meters utilize advanced technology to ensure accurate readings, crucial for optimizing energy consumption and maintaining process control.

Key Features

- High accuracy and repeatability for gas measurement
- Wide turndown ratio for flexible operation
- Robust design for harsh industrial environments
- Low pressure drop for energy efficiency
- Available with various output signals for integration

Applications

- Compressed air systems
- Natural gas metering
- Flue gases TVOC, nitrogen oxides, with display without display carbon dioxide, sulfur dioxide, carbon monoxide, oxygen, hydrogen sulfide, ammonia, odor and other multi-gas concentration
- HVAC and building management
- Combustion air control
- Wastewater treatment (digester gas)
- Chemical processing



Advanced Liquid Analysers

AC2000/AC3000/AC6000 Key Features

- High-precision measurements for various liquid parameters
- Real-time continuous monitoring capabilities
- Robust design for harsh industrial environments
- Self-cleaning sensor systems for minimal maintenance
- User-friendly interface with data logging
- Multiple output options for seamless integration

Technical Specifications

- Parameters: pH, ORP, Conductivity, DO, Turbidity, Residual Chlorine, COD/BOD/TSS/TOC etc
- Measurement Range: Varies by parameter (e.g., 0-14 pH, 0-20 mg/L DO)
- Accuracy: Typically ± 0.02 pH, ± 0.05 mg/L DO
- Operating Temperature: 0-60 °C
- Power Supply: 230V AC / 24V DC
- Outputs: 4-20mA, RS485 (Modbus RTU), HART
- Protection Rating: IP65 / IP68 (sensor dependent)

Applications: Essential for water and wastewater treatment, power generation, chemical processing, pharmaceutical manufacturing, food and beverage industries, and environmental monitoring to ensure process control and regulatory compliance.



d Gas ector

AC50

Advanced Gas Analysers

AC5000/AC9000 Series Key Features

- Precise detection for a wide range of gases, including toxic, flammable, VOCs, and specific pollutants (O_2 , CO, CO_2 , H_2S , NH_3 , SO_2 , NO_x).
- Real-time, continuous monitoring with rapid response times for critical applications.
- Modular sensor design for easy replacement, scalability, and extended lifespan.
- Automatic self-calibration and comprehensive diagnostic functions ensure reliable operation.
- Robust, explosion-proof casing designed for harsh industrial and hazardous environments.
- Integrated data logging and wireless connectivity for seamless remote monitoring and data access.

Technical Specifications

- Detected Gases: O_2 , CO, CO_2 , H_2S , NH_3 , SO_2 , NO_x , CH_4 , VOCs (configurable)
- Measurement Principle: Electrochemical, Infrared, Catalytic Combustion, Photoionization (PID)
- Accuracy: Typically $\pm 2\%$ FS or ± 3 ppm (whichever is greater, depends on gas)
- Response Time (T_{90}): Less than 30 seconds
- Operating Temperature: $-20^\circ C$ to $+50^\circ C$
- Power Supply: 230V AC or 24V DC
- Outputs: 4-20mA, RS485 (Modbus RTU), Ethernet, Wireless (LoRa, Wi-Fi)
- Protection Rating: IP66 / Ex d IIB T4 (explosion-proof)

Applications: Our GasGuard analysers are essential for process monitoring, leak detection, workplace safety, and ensuring environmental compliance across diverse industries. They are widely utilized in chemical and petrochemical plants, oil and natural gas facilities, steel production, power generation, mining, and waste treatment facilities. Additionally, they are ideal for ambient air quality monitoring and pollution source tracking.

Level Sensors & IoT Solutions



PROLEVEL Series

Our comprehensive ProLevel Series offers advanced solutions for precise level measurement:

- **ProLevel 500:** Utilizes Diffused Piezoelectric technology for accurate sensing.
- **ProLevel 1000 & 1000R:** Ultrasonic Level Transmitters with a versatile range from 4m to 30m.
- **ProLevel 6000:** Radar Level Transmitter, perfectly suited for challenging applications with corrosive liquids and fluctuating surfaces.



CONNECT+ IoT Platform

Our advanced CONNECT+ IoT Platform provides seamless remote monitoring and data integration capabilities:

- Access real-time data and insights from anywhere.
- Receive instant reports and critical alerts for timely decision-making.
- Supports diverse connectivity options including 4G/GPRS, LoRa, and WiFi Gateways.
- Enables seamless data integration with TNPCB/PCB systems.
- Offers centralized cloud server integration for all plant data.
- Includes a robust Machine-to-Machine (M-to-M) Communication Software Suite for streamlined operations.

Field Instruments - PROEX Series



Pressure Transmitters

High-precision devices that convert measured pressure (gauge, absolute, or differential) into a standardized electrical signal (e.g., 4-20mA, HART protocol) for remote monitoring and control systems. Essential for process automation in diverse industrial applications.



Pressure Switches

Robust instruments designed to detect and respond to specific changes in fluid or gas pressure. They feature adjustable set points and provide discrete (on/off) electrical signals, commonly used for alarming, interlocking, or controlling pumps and hydraulic systems.



Temperature Transmitters

Convert raw temperature measurements from RTD or thermocouple sensors into a scalable electrical output (e.g., 4-20mA, RS485). They provide accurate and stable temperature signals for critical processes in HVAC, industrial ovens, and energy management systems, ensuring optimal efficiency.



Gauges

Reliable mechanical devices that provide immediate, local visual indication of pressure or temperature levels without external power. Crucial for on-site monitoring, troubleshooting, and safety checks across all industries, available as Bourdon tube pressure gauges and bimetallic thermometers.



Our Services



Installation & Commissioning

Expert setup and initial operation of all our industrial instruments and systems.



Calibration & Certification

Ensuring the accuracy and compliance of your equipment with precise calibration services.



After-Sales Support

Comprehensive maintenance, repair, and troubleshooting services for continued operational excellence.



Training & Consulting

Empowering your team with in-depth product knowledge and optimizing your industrial processes.



System Integration

Seamlessly connecting our devices and platforms with your existing infrastructure for unified data management.



Repair & Refurbishment

Bringing major equipment back to optimal performance through professional rehabilitation and retrofitting.

Industries We Serve



ETP/STP/CETP

Providing precise flow measurement and analytical solutions for efficient wastewater treatment, ensuring regulatory compliance and environmental protection in Effluent, Sewage, and Common Effluent Treatment Plants.



Process Industries

Enabling precise control and monitoring of various parameters like flow, level, and analytical composition across diverse process manufacturing, optimizing production and resource utilization.



Utilities

Supporting the reliable operation of essential services such as electricity, natural gas, and water distribution through accurate metering, leak detection, and infrastructure monitoring.



Agriculture

Implementing sensors and IoT solutions for irrigation management, soil analysis, and environmental monitoring in modern farming, optimizing crop yield and resource efficiency.



Feed Industry

Supporting the production of animal feed with accurate measurement of raw materials, moisture content, and final product consistency, ensuring quality and nutritional value.



Power Plants

Critical for monitoring steam, water, and fuel flows, as well as analyzing emissions and water quality, enhancing efficiency and safety in thermal, hydro, and nuclear power generation facilities.



Oil & Gas

Offering robust instrumentation for exploration, extraction, refining, and distribution, including solutions for crude oil, natural gas, and refined products to ensure safety and efficiency.



Boiler & Petrochemical

Delivering specialized solutions for high-temperature and high-pressure environments, including precise flow and analytical measurements for efficient boiler operation and safe petrochemical processing.



Chemical Industry

Offering highly accurate and corrosion-resistant instruments for chemical processing, synthesis, and storage, ensuring product purity, process safety, and waste management.



Pharmaceutical

Providing sterile and highly accurate instrumentation for drug manufacturing, R&D, and quality assurance, meeting stringent regulatory requirements for purity and consistency.



Automotive Industry

Supporting manufacturing processes with accurate measurements for paint shops, engine testing, and utility management, ensuring quality control and operational efficiency in vehicle production.



Water Treatment

Supplying essential instruments for municipal and industrial water purification, desalination, and distribution networks, ensuring water quality and efficient resource management.



Environmental Protection

Providing advanced analysers and monitoring systems for air quality, water pollution, and emission control, aiding industries in achieving sustainability and regulatory compliance.



Food & Beverages

Delivering hygienic and precise measurement solutions for ingredient batching, processing, and quality control, ensuring product consistency and safety from farm to table.



Cement Industry

Applying robust instruments for raw material handling, kiln operation, and emission monitoring, crucial for optimizing energy consumption and ensuring environmental standards in cement production.



Quality Standards & Contact Information

Our Quality Certifications & Registrations



- **ROC Certificate of Incorporation - June 1998**
Company Limited by Shares, Non-Government, Private Limited
(Certificate No. 040730)
- **Corporate License:** U30006TN1998PTC040730
- **Factory License:** KPM13686
- **Department of Industries and Commerce Manufacturing:**
4542/A5/2011/F.N.8347
- **Legal Metrology Weights and Measure Manufacturing:** I-
23/1/2023/-W&M
- **ISO 9001:2015:** 23UQAT5110 Quality Management System
- **ISO14001:2015 :**23UEAU8910 Environmental Management system
- **ISO 4064-1:2015 (Equivalent to OIML R 49-1:2013) :** 23UWAU9210
Standard for Cold Portable and Hot Water Metering
- **ISO/IEC 17025:** 23UTAU9110 International Standard for Testing and
Calibration Laboratories
- **UL Certification:** 23UUAT5210 Trust for Safety and Performance
- **CE Certification:** 23UCAT5310 Compliance with European Safety
Standards
- **ATEX Certification:** 23UAAU9010 Equipment Safe for Explosive
Atmospheres

Contact LABTECH

Labtech Electronics Private Limited

Head Office :No: 1/3, Porur-Kundrathur High Road, Periyapanicheri,
Chennai-600128, Tamilnadu, India

Phone: 91-44-48605048

India: +91 9043938211, 9840839875, 9840909211

International +91 9840839871

Instagram: [labtechelectronics_official](#)

Email: sales@labtech.co.in, service@labtech.co.in

Website: www.labtech.co.in

