



**Water Metering**



**Energy Sub-Metering**



**Electricity Metering**



**Gas Consumption  
Sub-Metering**



**IOT Dataloggers**



**EV Charging Services**



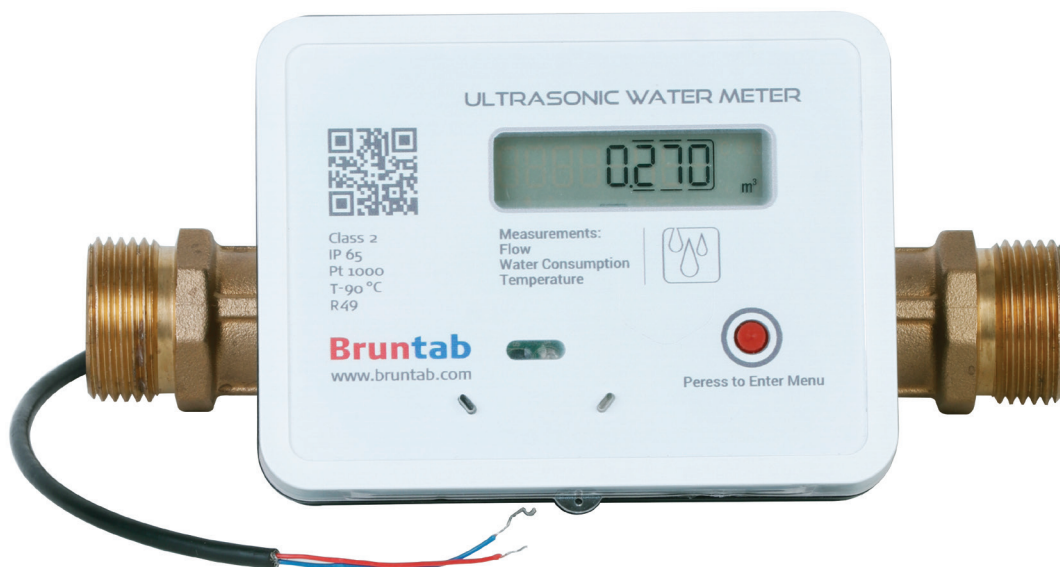
# Water Metering

Smart ultrasonic water meters offer accurate water consumption measurement through advanced technology. They come in various sizes suitable for residential, commercial, and industrial applications.

## Key Features:

- High precision with standard outputs for real-time data transmission
- Durable design for any environment
- Economical price

These meters are widely used for metering and sub-metering purposes





## Energy meter in various sizes for different applications

An energy meter calculates the heat and cooling exchanged in a hydronic system.

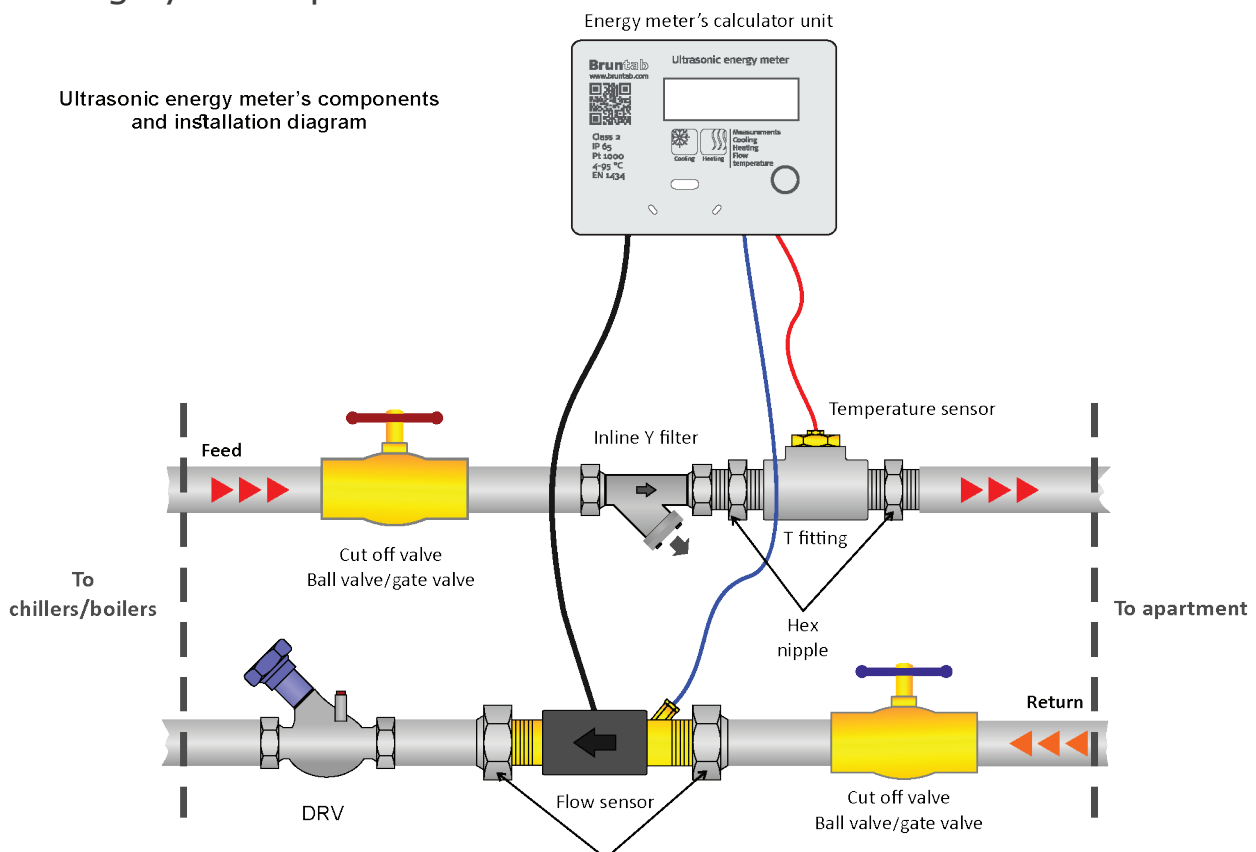
In buildings with central Cooling/heating, energy meters are widely used to Allocate the amount of energy consumed by each apartment.

All data is automatically gathered from meters and sent to the EEMS online software, where it is transferred on a daily basis for Submetering purposes.

Besides submetering and billing, heat meters can help reduce maintenance costs and breakdowns by logging various data during system operation.



Ultrasonic energy meter's components and installation diagram





## Smart Power Meter



### Bruntab BRN3-CT/D Three Phase Din Rail Energy Meter

Bruntab BRN3-CT/D three phase din rail energy meter is an intelligent instrument designed mainly for electric energy statistics and management needs of power systems, industrial and mining enterprises, and public facilities. The 3 phase din rail energy meter has the advantages of high precision, small size, and convenient installation.

Three phase din rail energy meter BRN3-CT/D can measure all power parameters, with 2~31 sub-harmonic and total harmonic content detection. With RS485 communication interface and optional MODBUS-RTU protocol, the power meter can be widely used in various control systems, SCADA systems, and energy management systems.

### Main Functions

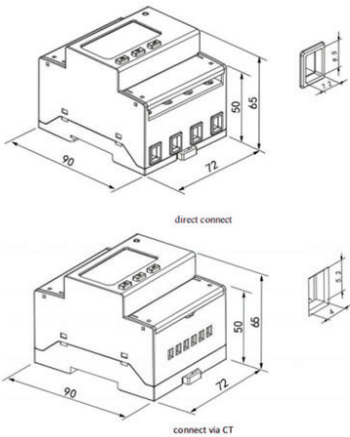
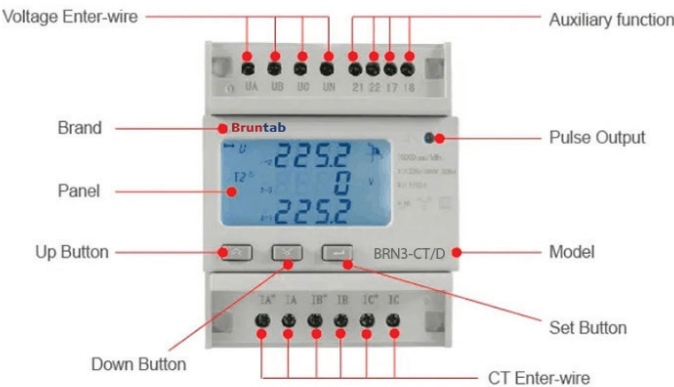
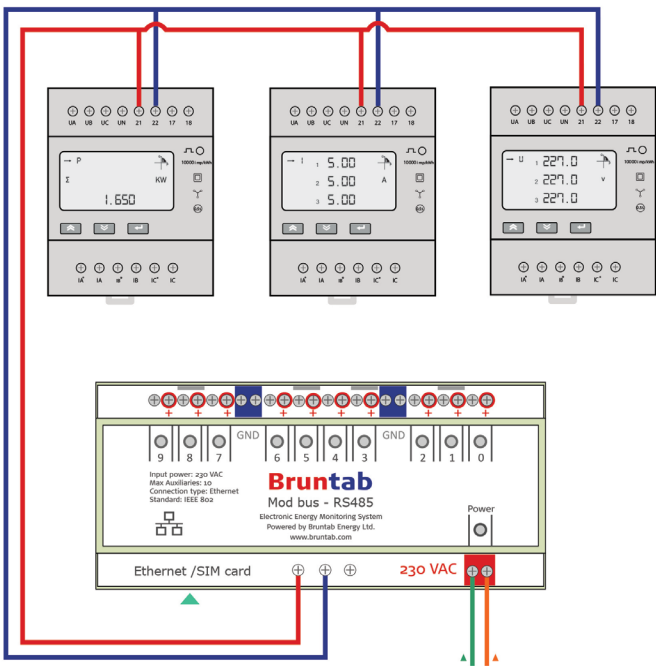
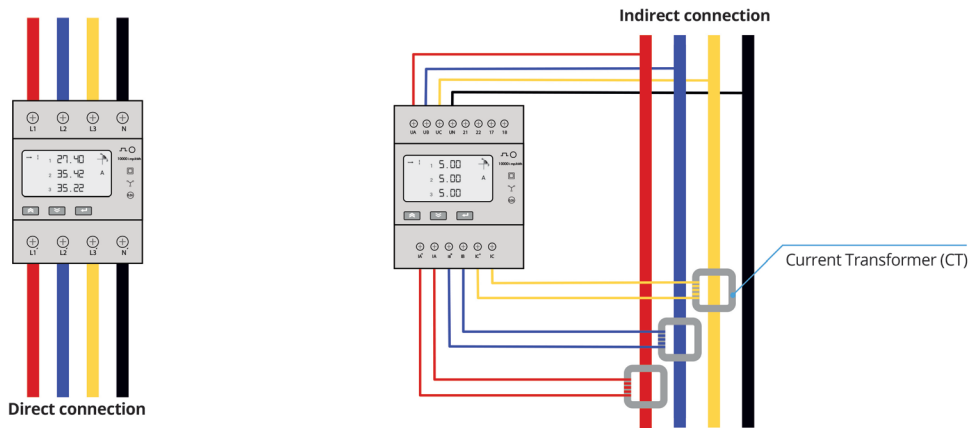


### Full Parameter Measurement High precision Easy Installation Small Volume

Measurment 1	3-phase AC kWh, kVarh
Measurment 2	U,I,P,Q,S,PF,F and etc
Display	LCD Display
HMI	Keypads Programming
Communication	Rs485 (MODBUS-RTU)
Multi-rate/tariff	4 Tariff Rates and etc
Harmonic	2~31st&Total Harmonic
Data Function	Data Fronzen, Max Demand

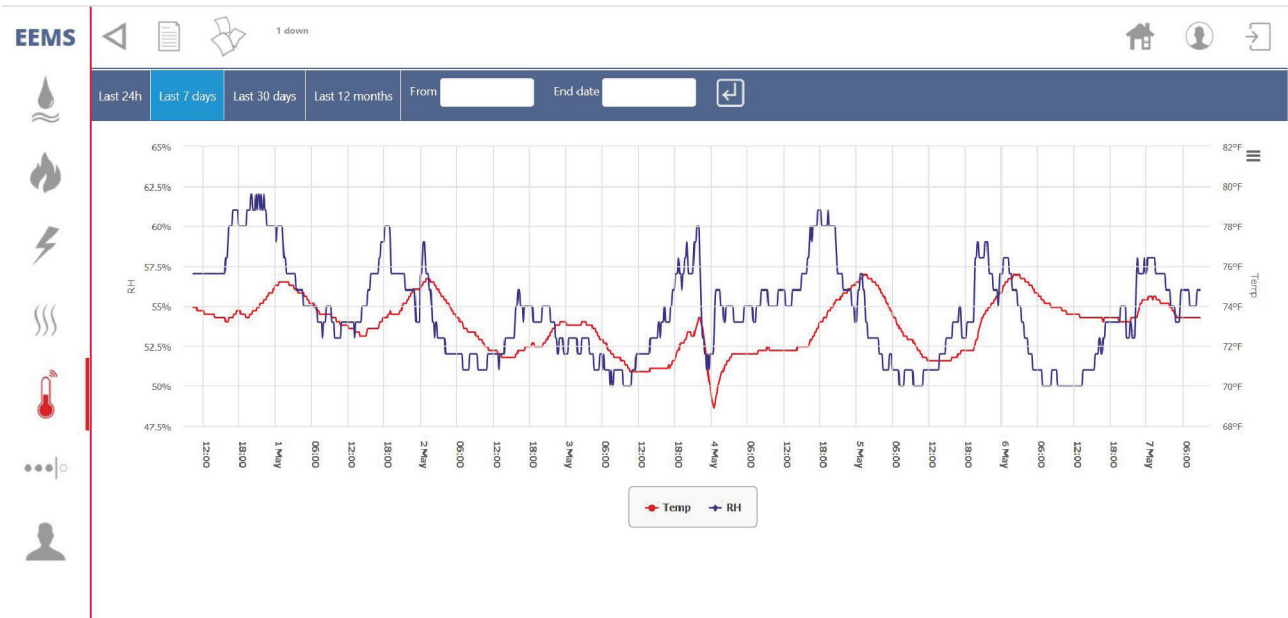


# Smart Power Meter





# EEMS Web-based Application



EEMS helps users not only monitor their consumption but also optimize hydronic system and mechanical devices such and pumps, chiller, and electromotors, etc.



**Electricity Bill**  
Apartment: «19»  
Building: Pasargad  
From Date: 7/3/2024  
To Date: 8/15/2024

Apartment's consumption: 740.21 (kWh)  
Share of energy from shared: 0 \$

Average consumption :
<b>% -51</b>
Payable: 14 \$



**Electricity Bill**  
Apartment: «20»  
Building: Pasargad  
From Date: 7/3/2024  
To Date: 8/15/2024

Apartment's consumption: 485.53 (kWh)  
Share of energy from shared: 0 \$

Average consumption :
<b>% -68</b>
Payable: 9 \$



**Electricity Bill**  
Apartment: «21»  
Building: Pasargad  
From Date: 7/3/2024  
To Date: 8/15/2024

Apartment's consumption: 167.45 (kWh)  
Share of energy from shared: 0 \$

Average consumption :
<b>% -89</b>
Payable: 3 \$



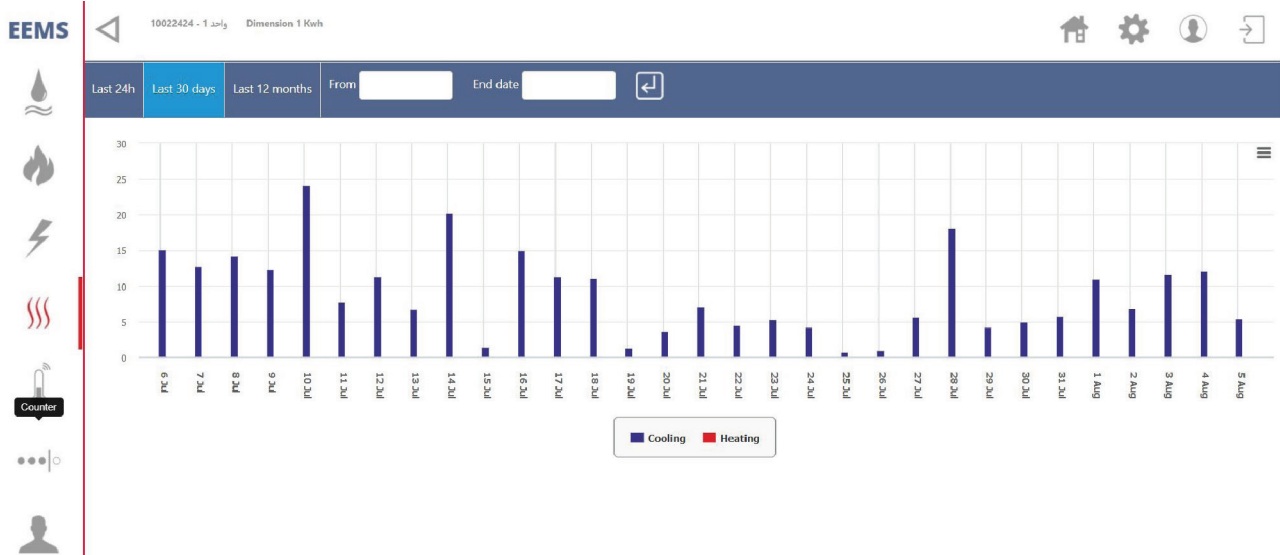
**Electricity Bill**  
Apartment: «23»  
Building: Pasargad  
From Date: 7/3/2024  
To Date: 8/15/2024

Apartment's consumption: 40,195.53 (kWh)  
Share of energy from shared: 0 \$

Average consumption :
<b>% 2,558</b>
Payable: 775 \$



## EEMS Web-based Application



EEMS is an online application that works with various smart meter devices. It allows users to monitor their consumption, view recorded data, and generate reports.

By Using EEMS, you can optimize your energy consumption and manage your own bill.

You have access to your data anywhere on any device.



## Universal Modbus Bridge

The Universal Modbus Bridge is a powerful and flexible device designed to connect RS485, Modbus-enabled sensors or M-BUS meters and devices to our advanced web application, offering comprehensive data management, reporting, and alarm functionality.

### Key Features:

**RS485 Interface:** Connects seamlessly to Modbus devices, supporting up to 64 devices on a single RS485 network.

**Multi-model Device Compatibility in the same network:** Reads multiple devices with different Modbus structures within the same network, offering unparalleled flexibility.

**M-Bus Support:** When paired with a M-BUS voltage level converter, it can also read M-Bus meters, broadening its utility.

**WiFi and LAN Connectivity:** Provides versatile networking options for reliable data



Part Number: UNIBRG  
Multi Device - No Alarm  
DIN Rail Mounting

**Customizable Units and Ranges:** Allows users to define measurement ranges and units in the application for tailored reporting.

**Data Logging and Reporting:** Records all sensor data securely for detailed analysis and reporting.

**Advanced Alarm Functions:** Integrates with EEMS Cloud to deliver real-time alerts and trend-based notifications.

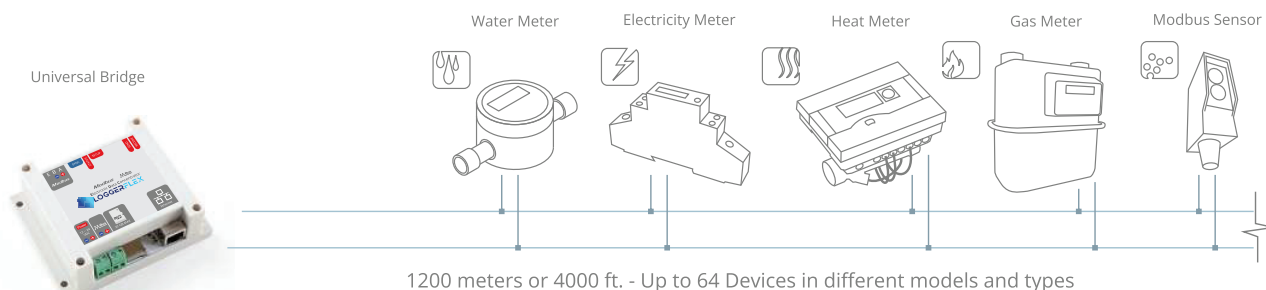
**Remote Configuration:** Enables receiving and updating Modbus device configurations remotely for hassle-free management.

The Universal Modbus Bridge is a comprehensive solution for managing and integrating Modbus devices into a single, powerful platform, ensuring seamless data monitoring, remote management, and actionable insights for diverse industrial applications.



Part Number: MODBUS  
Single device - WiFi  
With Alarm for up to  
2 (Two) Parameters

## RS485 & M-bus Network diagram



## BLOCK External Temp

Ideal for monitoring temperature in extreme environments, BLOCK External Temp is perfect for applications in industrial processes, cold storage, and environmental monitoring. It supports precise temperature tracking and customizable reporting for diverse needs.

### Key Features:

**Wide Temperature Range:** The external probe operates from -55°C to +125°C, making it suitable for a variety of applications.

**Detachable Probe Options:** Customers can choose between an ordinary model or a Thermowell pocket for enhanced durability and installation flexibility.

**NIST Certification Option:** The external sensor is available with or without a NIST traceable calibration certificate, catering to different compliance requirements.

**Automated Alarms:** Sends phone calls, texts, and email alerts if temperature measurements exceed set thresholds or if digital inputs are activated. **Data Analysis & Reporting:** Provides detailed records, graphs, and min-max-average reports, and supports specialized applications with customized data for compliance and operational efficiency.

**Data Security:** bruntab ensures tamper-proof, FDA-compliant data storage with daily backups. Digital Tracing logs all interactions, supporting transparency and audit accountability.



Available in Two (2) Variations



WiFi



Cellular



- **PORT I** External Digital Temp Sensor
- **PORT II** Digital Input (optional)
- **PORT III** Flood Detector (optional)

## Monitoring Capabilities



Record & Send Alarm (Internal)



Record & Send Alarm (Detachable)



Only Recording



Temp Probe



Ambient Temp



Relative Humidity



Location  
Cellular Only



Flood Detector



Digital Input

## Technical Specifications

Weight	300 gr   10.6 Oz (including 4 x AA Alkaline batteries)
Digital Input type	Passive (Dry Contact, Door Sensor, Switch, PLC Output, etc.)
Temperature and RH Specifications	Refer to BLOCK Family general Specification Sheet
External Sensor's measurement length	1.5 meters (5 ft) - Extendable up to 9 meters (30 ft.)
External Sensor's measurement range	-55°C to +125°C (-67°F to +257°F)

Refer to the BLOCK Family "General Specifications" and External sensor's dedicated pages in the catalog for more technical details.





## BLOCK Essential Use Cases

### Agriculture



BLOCK Essential is a valuable tool for optimizing agricultural environments. By monitoring temperature and humidity, it generates detailed Vapor Pressure Deficit (VPD) reports, offering critical insights for managing plant transpiration and photosynthesis. High and low-temperature alarms ensure crops are protected from adverse conditions, while real-time notifications allow farmers to take prompt action to maintain optimal growing environments. The device's ability to monitor specific humidity and dew point further aids in preventing crop stress and diseases.



In property management, BLOCK Essential addresses common challenges with precision. Its mold prediction alarm tracks temperature and humidity to assess mold growth risks, helping managers intervene early. The temperature alarm protects pipes by detecting frost conditions, while the flood detector alerts instantly to water leaks, preventing significant property damage. The device's alarm dialer function is especially useful in emergencies like fire, allowing property managers to send simultaneous call, text, and email alerts to all residents, ensuring fast and effective communication without monthly costs or landlines.

### Property Management



### Preservation



BLOCK Essential excels in preserving artifacts, historical items, and delicate materials. It records temperature and humidity with precision, ensuring conditions are stable and suitable for long-term storage. The advanced trend-detection alarm highlights fluctuations in relative humidity, which can cause more harm to artifacts than consistently high levels, allowing for proactive adjustments. Additionally, the device sends real-time alerts if environmental conditions go out of range, safeguarding valuable collections and ensuring compliance with preservation standards.





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