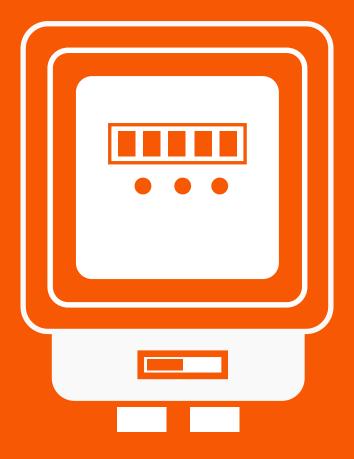
BENLO®





METER

ABOUT US



Bentec India Limited embarked on its journey in Energy Metering in 1995, evolving from Electro-Mechanical Meters to Static Meters and now to Smart Meters. With a legacy spanning over three decades, we are committed to delivering cutting-edge and reliable metering solutions that cater to diverse applications. Our expertise and dedication to innovation have positioned us as a trusted name in the industry, ensuring efficient energy management for utilities and consumers alike.

OUR VISION

To be a global leader in the manufacturing of innovative and sustainable metering solutions, integrating cutting-edge technology for precise energy measurement and efficient electrical distribution. We aspire to enhance energy access, improve operational efficiency, and contribute to a greener future by delivering high-performance products that meet the dynamic needs of our customers and society.



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OUR MISSION

At BENTEC, our mission is to develop and deliver state-of-the-art metering solutions that enhance energy efficiency, reliability, and safety. We are committed to maintaining the highest standards of quality and innovation while adapting to the evolving needs of our customers. Our focus is on providing advanced, durable, and intelligent electrical solutions that empower a smarter and more sustainable energy future.

WHY BENTEC?

BENTEC Group is distinguished by its unwavering commitment to quality, innovation, and customer satisfaction. Our comprehensive product range, state-of-the-art manufacturing, and dedicated R&D efforts enable us to provide customized, high-precision metering solutions that meet the evolving demands of power utilities and energy consumers. With a strong foundation in advanced manufacturing and a vision for the future, BENTEC India Limited continues to redefine metering technology, ensuring reliable energy management for a smarter tomorrow.





OUR CULTURE

At BENTEC, we cultivate a culture of innovation, collaboration, and integrity. Our team of dedicated professionals shares a passion for excellence, driving continuous learning and professional growth. We believe in fostering a collaborative work environment where ideas thrive, ensuring we stay ahead in delivering industry-leading solutions.



Introduction

Single Phase Two Wires Static Smart Meter is designed for residential and commercial consumers. It offers accurate measurement, multifunction capabilities and robust anti-tamper features. The smart meter supports WAN (4G/NBIoT) or NAN (RF) communication technology in line with relevant BIS, ensuring seamless data transmission and integration with Advanced Metering Infrastructure (AMI) systems.



TECHNICAL SPECIFICATION

Rated Voltage : 240V (-40% to +20%)

Current Range : 5-30A and 10-60A

Accuracy Class : Class 1.0

Load Switch : UC1 or Better

Storage Temperature : -25°C to +70°C

Operating Temperature : -10°C to +55°C

Communication Protocol: IS15959/ DLMS

Communication Interface: Optical port, Bluetooth, NBIoT /4 G

(WAN) or RF (NAN)

Event Logging : As per IS 15959 and Customer

Requirement

Metering : Four quadrant energy

measurements

ToU : Up-to 08 Time Zones and Rate

registers

Dimention : 136 x 222 x 71 mm

KEY FEATURES

- Accurate Measurement : Complies with IS16444 Part-1, CBIP-325 and IEC standards
- Multifunction Display : LCD Display
- Alarms: Alert for power events, tamper events etc.
- Interoperability: Standard Communication protocol as per IS 15959 for seamless Integration
- Remote Communication : Enable remote bi-directional communication (Push & Pull method)
- OTA Updating: Enables updates remotely ensuring latest features and regulations compliances
- Real-Time Monitoring: Instantaneous insights of demand & quality help in load forecasting & Planning
- Anti-Tamper Features : Measure, Detect, record and report tampers to ensure data integrity & Accuracy
- Two-way Communication: Remote bi-directional communication enables on Demand and Push Mode
- Data Profile: Electrical energy multiple profiles helps in data monitoring, recording & optimization





Introduction

Three Phase four Wires Static Smart Meter is designed for residential, commercial and industrial consumers. It offers accurate measurement, multifunction capabilities and robust anti-tamper features. The smart meter supports WAN (4G/NBIoT) or NAN (RF) communication technology in line with relevant BIS, ensuring seamless data transmission and integration with Advanced Metering Infrastructure (AMI) systems.



TECHNICAL SPECIFICATION

Rated Voltage : $3 \times 240 \text{V} (-40\% \text{ to } +20\%)$

Current Range : 3x 10-60A and 3x 20-100A

Accuracy Class : Class 1.0

Load Switch : UC1 or Better

Storage Temperature : -25°C to +70°C

Operating Temperature : -10°C to +55°C

Communication Protocol: IS15959/ DLMS

Communication Interface: Optical port, Bluetooth, NBIoT

/4G (WAN) or RF (NAN)

Event Logging : As per IS 15959 and Customer

Requirement

Metering : Four quadrant energy

measurements

ToU : Up-to 08 Time Zones and Rate

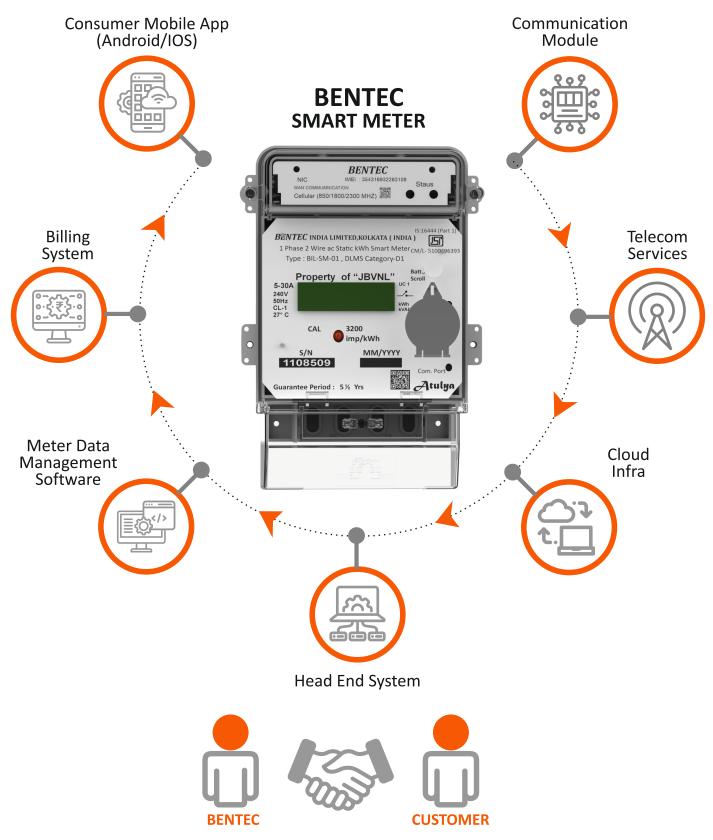
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KEY FEATURES

- Accurate Measurement : Complies with IS16444 Part-1, CBIP-325 and IEC standards
- Multifunction Display : LCD Display
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HOW SMART METER FUNCTION BENTEC + TSP



BENTEC INDIA LTD AS AMISP / SI OFFERS
COMPREHENSIVE SOLUTIONS AND AFTER SALES SERVICE SUPPORT



SINGLE PHASE BI-DIRECTIONAL METER FOR SOLAR ROOFTOP

Introduction

BENTEC has developed a range of advanced energy meters designed to cater various needs within residential, commercial and industrial segment consumers. These meters are designed to measure and record electricity consumption accurately and are suitable for varying load conditions for both Utility and Solar supply sources.

TECHNICAL SPECIFICATION

: 240V AC, 5-30A, 10-60A Rating

: Class 1 as per IS 13779:2020 Accuracy

Starting Current 0.2% of basic current (lb)

Display Type : LCD Display Power Consumption : As per IS13779

Power Factor : Zero lag - Unity - Zero Lead

: -25°C to +55°C Temperature Range

Humidity ≤95% non-condensing

Frequency 50Hz ± 5%

KEY FEATURES

▶ Communication Protocol: As per IS15959 (DLMS)

Communication Port: Optical Port & RJ11-

Optional

Anti-tamper Features : As per Indian Standards and Customer Requirement

- Daily (midnight) & every 30/15 Min Load profile
- Power On-OFF event logging
- Meter reading provision in power OFF condition
- Robust and compact design
- Four quadrant energy measurements



MEASURING PARAMETERS

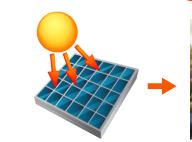
Energy Parameters- As per Customer Requirement

- Energy Parameters (kWh, kVArh, kVAh)
- Maximum Demand (kW, kVAr, kVA)
- TOU: Up-to 8 Time Zones and Rate registers

ELECTRICAL PARAMETERS

- Instantaneous Voltage
- Instantaneous Current
- Instantaneous Frequency
- Instantaneous Power Factor





Solar Panels converts energy from the sun into electricity

The energy is used in your home, school or business



An Invertor converts the electricity produced by the solar panels from direct current (DC) to alternating current (AC) for use in your home, school or husiness







Excess energy from your solar panels not used in your home goes back to the electrical grid



A bi-directional meter measures energy used and excess energy produced.

THREE PHASE BI-DIRECTIONAL METER FOR SOLAR ROOFTOP

Introduction

BENTEC has developed a range of advanced energy meters designed to cater various needs within residential, commercial and industrial segment consumers. These meters are designed to measure and record electricity consumption accurately and are suitable for varying load conditions for both Utility and Solar supply sources.

TECHNICAL SPECIFICATION

: 3 x 240V AC, 5-30A, 10-60A Rating : Class 1 as per IS 13779:2020 Accuracy

Starting Current : 0.2% of basic current (lb)

Display Type : LCD Display Power Consumption : As per IS13779

Power Factor : Zero lag - Unity - Zero Lead

Temperature Range : -25°C to +55°C

Humidity : ≤95% non-condensing

Frequency 50Hz ± 5%

KEY FEATURES

▶ Communication Protocol: As per IS15959 (DLMS)

Communication Port: Optical Port & RJ11-Optional

- Anti-tamper Features : As per Indian Standards and Customer Requirement
- Daily (midnight) & every 30/15 Min Load profile
- Power On-OFF event logging
- Meter reading provision in power OFF condition
- Robust and compact design
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MEASURING PARAMETERS

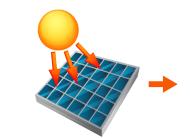
Energy Parameters- As per Customer Requirement

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- Maximum Demand (kW, kVAr, kVA)
- TOU: Up-to 8 Time Zones and Rate registers

ELECTRICAL PARAMETERS

- ▶ Instantaneous Voltage
- ▶ Instantaneous Current
- Instantaneous Frequency
- Instantaneous Power Factor







An Invertor converts the electricity produced by the solar panels from direct current (DC) to alternating current (AC) for use in your home, school or business

The energy is used in your home, school or business

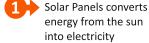






your solar panels not used in your home goes back to the electrical grid

A bi-directional meter measures energy used and excess energy produced.





SINGLE PHASE MULTIFUNCTION ELECTRONIC ENERGY METER (Utility Meter)

Introduction

BENTEC has developed a range of advanced energy meters designed to cater various needs within residential, commercial and industrial segment consumers. These meters are characterized by their precision, reliability & advanced features that support modern energy management and conservation practices for Single phase consumers.



TECHNICAL SPECIFICATION

Rating : 240V AC, 5-30A, 10-60A

Accuracy : Class 1 as per IS 13779:2020

Starting Current : 0.2% of basic current (Ib)

Display type : LCD Display

Power Consumption : As per IS13779

Power Factor : Zero lag - Unity - Zero Lead

Temperature Range : -25°C to +55°C

Humidity : ≤95% non-condensing

Frequency : $50Hz \pm 5\%$

KEY FEATURES

- ► Communication Protocol: As per IS15959 (DLMS)
- ▶ Communication Port : Optical Port & RJ11-Optional
- Daily (midnight) & every 30/15 Min Load profile Data
- Power On-OFF event logging
- Meter reading provision in power OFF condition
- Robust and compact design
- Anti-tamper Features : As per Indian Standards and Customer Requirement
- ▶ Four quadrant energy measurements

MEASURING PARAMETERS

Energy Parameters- As per Customer Requirement

- ▶ Energy Parameters (kWh, kVArh, kVAh)
- Maximum Demand (kW, kVAr, kVA)
- ▶ TOU: Up-to 8 Time Zones and Rate registers

ELECTRICAL PARAMETERS

- ▶ Instantaneous Voltage
- ▶ Instantaneous Current
- Instantaneous Frequency

THREE PHASE MULTIFUNCTION ELECTROINIC ENERGY METER (Utility Meter)

Introduction

The BENTEC make 3Ph 4 wires, multi-function energy meter is a sophisticated and highly accurate device designed for comprehensive energy measurement of Three Phase residential, commercial and industrial segment consumers.

TECHNICAL SPECIFICATION

Rating : 3x240V AC, 5-30A, 10-60A,

20-100A

Accuracy : Class 1 as per IS 13779:2020

Starting Current : 0.2% of basic current (Ib)

Display Type : LCD Display

Power Consumption : As per IS13779

Power Factor : Zero lag - Unity - Zero Lead

Temperature Range : -25°C to +55°C

Humidity : ≤95% non-condensing

Frequency : $50Hz \pm 5\%$



KEY FEATURES

- ▶ Communication Protocol: As per IS15959 (DLMS)
- ▶ Communication Port : Optical Port & RJ11-Optional
- Daily (midnight) & every 30/15 Min Load profile Data for 45/60/90 days
- Power On-OFF event logging
- Meter reading provision in power OFF condition
- Robust and compact design
- Anti-tamper Features : As per Indian Standards and Customer Requirement
- Four quadrant energy measurements
- ▶ 6/12 Months Billing histories
- Field configurable parameters as per IS15959

MEASURING PARAMETERS

Energy Parameters- As per Customer Requirement

- ▶ Energy Parameters (kWh, kVArh, kVAh)
- Maximum Demand (kW, kVAr, kVA)
- ▶ TOU: Up-to 8 Time Zones and Rate registers

ELECTRICAL PARAMETERS

- Instantaneous Voltage
- ▶ Instantaneous Current
- Instantaneous Frequency



SINGLE PHASE ELECTRONIC LCD DISPLAY ENERGY METER

Introduction

The BENTEC Make Single Phase Electronic LCD Display energy meter is a versatile and reliable product for accurate energy measurement. This meter is poised to meet the evolving needs of the Secondary market segment on PAN India level.

TECHNICAL SPECIFICATION

Rating : 1P2W, 240V AC, 5-30A, 10-60A Accuracy : Class 1 as per IS 13779:2020

(Latest Amnd)

Starting Current : 0.4% of basic current (Ib)

Power Consumption : As per IS13779

Power Factor : Zero lag - Unity - Zero Lead

Frequency : $50Hz \pm 5\%$

Ingress Protection : IP51

Operating Temp. : -10°C to +55°C

Storage Temp. : -25°C to +70°C

Data Storage : Active Energy (kWh)

Maximum Demand : MD (kW)-Optional

KEY FEATURES

- ▶ LCD DISPLAY: Large, backlit LCD display that provides clear and easy-to-read measuring parameters
- STATIC DESIGN: The static design of the meter ensures high reliability and accuracy
- PULSE OUTPUT: LED indication, pulse output for energy measurement
- AVAILABILITY: Ready to purchase, available in any authorized dealer warehouse
- ▶ **ANTI-TAMPER FEATURE:** As per Indian standards

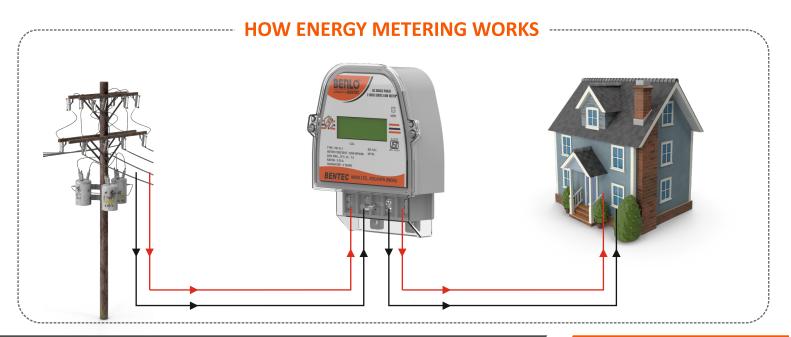


MEASURING PARAMETERS

▶ Active Energy (kWh)

As per Customer Requirement

- Maximum Demand kW
- ▶ Instantaneous Voltage
- ▶ Instantaneous Current
- nstantaneous Frequency
- ▶ Instantaneous Power Factor



THREE PHASE ELECTRONIC LCD DISPLAY ENERGY METER

Introduction

The BENTEC Make Three Phase Electronic LCD Display energy meter is a versatile and reliable product for accurate energy measurement. This meter is poised to meet the evolving needs of the Secondary market segment on PAN India level.

TECHNICAL SPECIFICATION

Rating : 3P4W, 240V AC, 5-30A, 10-60A Accuracy : Class 1 as per IS 13779:2020

(Latest Amnd)

Starting Current : 0.4% of basic current (Ib)

Power Consumption : As per IS13779

Power Factor : Zero lag - Unity - Zero Lead

Frequency : $50Hz \pm 5\%$

Ingress Protection : IP51

Operating Temp. : -10°C to +55°C

Storage Temp. : -25°C to +70°C

Data Storage : Active Energy (kWh)

Maximum Demand : MD (kW)-Optional

KEY FEATURES

- ▶ LCD DISPLAY: Large, backlit LCD display that provides clear and easy-to-read measuring parameters
- STATIC DESIGN: The static design of the meter ensures high reliability and accuracy
- ▶ PULSE OUTPUT: LED indication, pulse output for energy measurement
- AVAILABILITY: Ready to purchase, available in any authorized dealer warehouse
- **ANTI-TAMPER FEATURE:** As per Indian standards

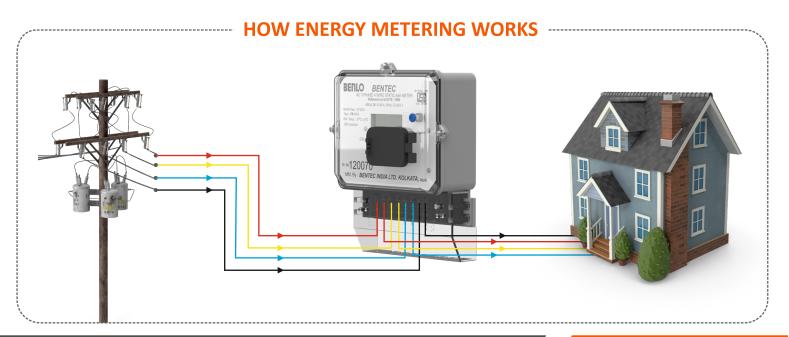


MEASURING PARAMETERS

▶ Active Energy (kWh)

As per Customer Requirement

- Maximum Demand kW
- ▶ Instantaneous Voltage
- ▶ Instantaneous Current
- nstantaneous Frequency
- ▶ Instantaneous Power Factor



AFTER-SALES SUPPORT:

AS AMISP / SI OFFERS COMPREHENSIVE AFTER-SALES SERVICE SUPPORT, INCLUDES:



Regional offices:
More than 28 local office
established on PAN India level
for immediate support



Training Programs:
Periodic training sessions
maximize the real uses of
AMI solutions



Customer Satisfaction:
Excellent after-sales services
ensure customers happiness
& satisfactions



Warranty:
Standard warranty
coverage with options for
extended warranties



Brand Loyalty:
Prompt service support fosters
brand loyalty as long-term
association with Utilities



Installation Expertise:
Professional team for
quality deployments &
configurations



Technical Support:
Toll free, 24/7 customer support for troubleshooting and maintenance



Corporate Office BENTEC INDIA LIMITED 150, Upen Banerjee Road, Kolkata, West Bengal, Pin: 70060



info@bentecindia.com



Customer Care No. **033-24 01 74 21**



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