

SIEMENS

MD-Series Power Metering

Quick Reference Guide



Scan code to download
this reference guide

MD-BMS series Sub Metering Kits Standard Features, No Display

Features

- Networked sub metering kit with BACnet MS/TP or Modbus RTU.
- Metering kit contains meter plus three current transformers (CTs).
- Meter is factory-configured for selected CT to reduce install time.
- This standard feature model is most cost-effective power metering solution in the family.
- Metering targeted for single- and three-phase circuit measurements.



These highly accurate ANSI C12.20-2010 Class 0.2 meters provide real time electricity metering data to any building automation system to support control of building or equipment energy costs. It captures kWh/kW energy and demand data and other electrical measurements on three-phase or single-phase circuit installations. CTs are internally shunted for intrinsically safe operation on energized conductors. Kits are available with current ratings of 100, 200, 400, 600 or 4000 Amps.

Applications

The meter flexibility, size, and ease-of-use make it ideal for gathering detailed consumption information in commercial, retail, data center, educational, government and industrial applications.

[Click on this link for MD-BMS Technical Specification](#)

MD-BMS Revenue Grade Sub Metering Kits Standard Features, No Display

Features

- Networked sub metering kit with BACnet MS/TP or Modbus RTU.
- Metering kit contains meter plus three highly accurate Revenue Grade current transformers (CTs).
- Meter is factory-configured for selected CT to reduce install time.
- Metering targeted for single- and three-phase circuit measurements.



The MD-BMS Revenue Grade metering kits have the same standard features as the MD-BMS model above. In addition, these metering kits are provided with enhanced accuracy current transformers that provide improved metering system measurement accuracy with end-to-end accuracies exceeding 0.5%. Revenue Grade sub metering kits are available with current ratings of 50, 100, 400 or 400 Amps.

Applications

The meter flexibility, size, and ease-of-use make it ideal for gathering detailed consumption information in commercial, retail, data center, educational, government and industrial applications. The improved accuracy make these ideal for cost allocation or tenant sub metering.

[Click on this link for MD-BMS Revenue Grade Technical Instruction](#)

MD-BMED series Sub Metering Kits Full Feature with Meter Display, Ethernet

Features

- Networked sub metering kit with BACnet MS/TP or Modbus RTU.
- Metering kit contains meter plus three current transformers (CTs).
- Meter is factory-configured for selected CT to reduce install time.
- Backlit display; Ethernet port adds BACnet IP, Modbus TCP protocols.
- Metering targeted for single- and three-phase circuit measurements.



The MD-BMED model has additional features compared to the standard model MD-BMS. It adds an integrated backlit display for local viewing of key measurement data. This model also adds Ethernet capability for use with controllers or systems requiring BACnet IP or Modbus TCP protocols. CTs are internally shunted for intrinsically safe operation on energized wires. Sub metering kits are available with current ratings of 100, 200, 400, 600 or 4000 Amps.

Applications

The meter flexibility, size, and ease-of-use make it ideal for gathering detailed consumption information in commercial, retail, data center, educational, government and industrial applications.

[Click on this link for MD-BMED Technical Specification](#)

MD-BMED Revenue Grade Sub Metering Kits Full Feature with Meter Display, Ethernet

Features

- Networked sub metering kit with BACnet MS/TP or Modbus RTU.
- Metering kit contains meter plus three highly accurate Revenue Grade current transformers (CTs).
- Meter is factory-configured for selected CT to reduce install time.
- Backlit display and Ethernet add BACnet IP, Modbus TCP protocols.
- Metering targeted for single- and three-phase circuit measurements.



The MD-BMED Revenue Grade metering kits have the same premium features as the MD-BMED model above. In addition, these metering kits are provided with enhanced accuracy current transformers that provide improved metering system measurement accuracy with end-to-end accuracies exceeding 0.5%. Revenue Grade sub metering kits are available with current ratings of 50, 100, 400 or 400 Amps.

Applications

The meter flexibility, size, and ease-of-use make it ideal for gathering detailed consumption information in commercial, retail, data center, educational, government and industrial applications. The improved accuracy make these ideal for cost allocation or tenant sub metering.

[Click on this link for MD-BMED Revenue Grade Technical Instruction](#)

MD-BMS, MD-BMED series Meters Individual Meters, No CTs

Features

- Standalone sub meters with BACnet and Modbus protocols.
- MD-BMS provides MS/TP and Modbus RTU options.
- MD-BMED adds Ethernet with BACnet IP or Modbus TCP with two-line backlit display.
- No CTs are included with these individual meters.



These highly accurate ANSI C12.20-2010 Class 0.2 meters provide real time electricity metering data to any building automation system to support control of building or equipment energy costs. They capture kWh/kW energy and demand data in addition to over 90 other electrical parameters for three-phase or single-phase electrical services.

No current transformers are included with these individual meters. These sub meters can be configured to utilize a wide range of MD series CTs via the meter USB port; using the free ViewPoint software.

Applications

These meters can be configured to utilize any MD series CTs to create job-specific current metering ranges. They can also be replacements.

[Click on this link for MD-BMS, MD-BMED Technical Specification](#)

MD-BMx series Installation Accessories Solutions for All MD series Applications

Features

- Accessories to promote proper installation and safety practices
- Meter mount and fuse protection module provides increased safety.
- Small meter enclosures provide NEMA1 housing for two meters.
- Optimized for use with MD-BMS and MD-BMED metering systems.



The model #567-090 DIN rail mount and fuse module provides easy meter mounting and meter external fusing for up to 600 Vac. Fuse blocks are clearly labeled for phase connections and convenient wires provide quick connection to the MD series meters.

NEMA 1 rated cabinets, with UL and CSA listings, are available in sizes optimized for the MD series meters. See models #567-551 for a blank door and #567-556 for a windowed door for observing the display.

Applications

For sub meter interior mounting and fusing in locations near the equipment being measured.

[Click on this link for Meter Mount & Fuse Module Technical Instruction](#)

[Click on this link for Meter Cabinets Technical Instruction](#)

MD series Current Transformers (CTs) Individual CTs for use with MD series Meters

Features

- Current transformers optimized for use with MD series meters
- Low-voltage output, internally shunted for safe use with energized conductors.
- Available in hinged style, split core and Rogowski Coil versions.
- CTs available from 5A to 4000A current ratings.
- Standard grade and very accurate Revenue Grade models available



These MD series current transformers (CTs) provide a linear low-voltage output that is directly proportional to the load current. These current transformers are safely and easily installed over existing electrical power lines without disconnecting the lines or interrupting service. They are used in applications including building automation, tenant submetering, performance verification and energy management. These devices are targeted for use with the Siemens MD Series Power Meters.

Links

[Click on this link for Midi-Mini Split Core CT Technical Specification](#)

[Click on this link for Split Core CT Technical Specification](#)

[Click on this link for Rogowski Coil CT Technical Specification](#)

[Click on this link for Revenue Grade Split Core CT Technical Spec](#)

[Click on this link for Revenue Grade Toroid Solid Core Technical Spec](#)

MD-BMS, MD-BMED series Videos and Links

Features

- Installation video link for MD series power sub metering kits



Links

The following links are available to additional technical support literature and videos for the MD series of power metering devices.

[Click on this link for MD series Sub Metering Installation Video](#)

[Click on this link for MD-BMS, MD-BMED Users Guide](#)

MD-12HD Series High Density Networked Metering System

Features

- 12 channel networked power metering device with optional display, enclosure.
- Supports BACnet MS/TP, IP; Modbus RTU, TCP per SunSpec IEEE-754 floating point.
- Includes four pulse inputs, power/current alarms and internal logging of kWh data.
- ANSI C12.20-2010 Class 0.2 Revenue Grade meter for voltages from 90 to 600 Vac.
- Metering targeted for single- and three-phase circuit measurements.



This 12-channel networked metering system provides real time electricity metering data to any building automation system to support control of building or equipment energy costs. They capture kWh/kW energy and demand data in addition to hundreds of other electrical parameters for three-phase or single-phase electrical services.

No CTs are included with these metering systems. These high-density meters can be configured to utilize any of the MD series CTs via the meter's USB connection; using the free ViewPoint-HD software.

Applications

This high-density networked meter's flexibility, size, and ease-of-use make it ideal for gathering detailed consumption information for retail, commercial, data center, educational, government and industrial uses.

[Click on this link for MD-12HD Technical Specification](#)

MD-BM-xxHD series Video and Links

Features

- Installation video for MD-xxHD series networked metering systems.



Links

The following links are available to additional technical support literature and videos for the MD-xxHD series of networked power metering systems

[Click on this link for MD-xxHD series Installation Video](#)

[Click on this link for MD-xxHD series User Manual](#)

MD-48HD Series High Density Networked Metering System

Features

- 48 channel networked power metering device with optional display, enclosure.
- Supports BACnet MS/TP, IP; Modbus RTU, TCP per SunSpec IEEE-754 floating point.
- Includes two independent three-phase voltage inputs and DC power output.
- Provides power/current alarms and internal logging of kWh data.
- ANSI C12.20-2010 Class 0.2 Revenue Grade meter for voltages from 90 to 600 Vac.
- Metering targeted for single- and three-phase circuit measurements.



This 148-channel networked metering system provides real time electricity metering data to any building automation system to support control of building or equipment energy costs. They capture kWh/kW energy and demand data in addition to hundreds of other electrical parameters for three-phase or single-phase electrical services.

No CTs are included with these metering systems. These high-density meters can be configured to utilize any of the MD series CTs via the meter's USB connection; using the free ViewPoint-HD software.

Applications

This high-density networked meter's flexibility, size, and ease-of-use make it ideal for gathering detailed consumption information for retail, commercial, data center, educational, government and industrial uses. The high channel count for this device makes it perfect for equipment rooms and mechanical penthouses in buildings.

[Click on this link for MD-48HD Technical Specification](#)

Information in this document is based on specifications believed correct at the time of publication. The right is reserved to make changes as design improvements are introduced. Product or company names mentioned herein may be the trademarks of their respective owners. © 2019 Siemens Industry, Inc.

Siemens Industry, Inc.
Building Technologies Division
1000 Deerfield Parkway
Buffalo Grove, IL 60089-4513
USA
+ 1 847-215-1000

Your feedback is important to us. If you have comments about this document, please send them to SBT_technical.editor.us.sbt@siemens.com

Document No. A6V11610508
Printed in the USA
Page 4 of 4