LEVITON

VerifEye™ Submetering Solutions

Smart Solutions for Energy Monitoring and Tenant Billing

SMARTer Metering. SMARTer Control. REAL Savings.

THE BENEFITS OF SUBMETERING

VerifEye™ delivers a comprehensive line of leading-edge submeters, communication products and software solutions as the key building blocks to help you better manage costs and conserve energy.

Develop your strategic energy management plan using revenue grade real-time energy usage information to measure, monitor and manage operations to improve your bottom line. From tenant billing to energy measurement & verification (M&V) software solutions, VerifEye offers cost effective scalability and integration to provide you with the solution you need today that can be expanded in the future.

For additional energy savings, combine VerifEye with Leviton lighting controls for a complete energy management solution from a single source.

VerifEye delivers accurate information for:

• Tenant billing/cost allocation

• Load profiling & benchmarking

• Measurement & verification (M&V)

• Energy conservation programs

• LEED projects

• Government mandates

• AMR/BMS/EMS integration

• Renewable and bi-directional applications

• Compliance with green building initiatives

VerifEye™ Smart Submetering Solutions
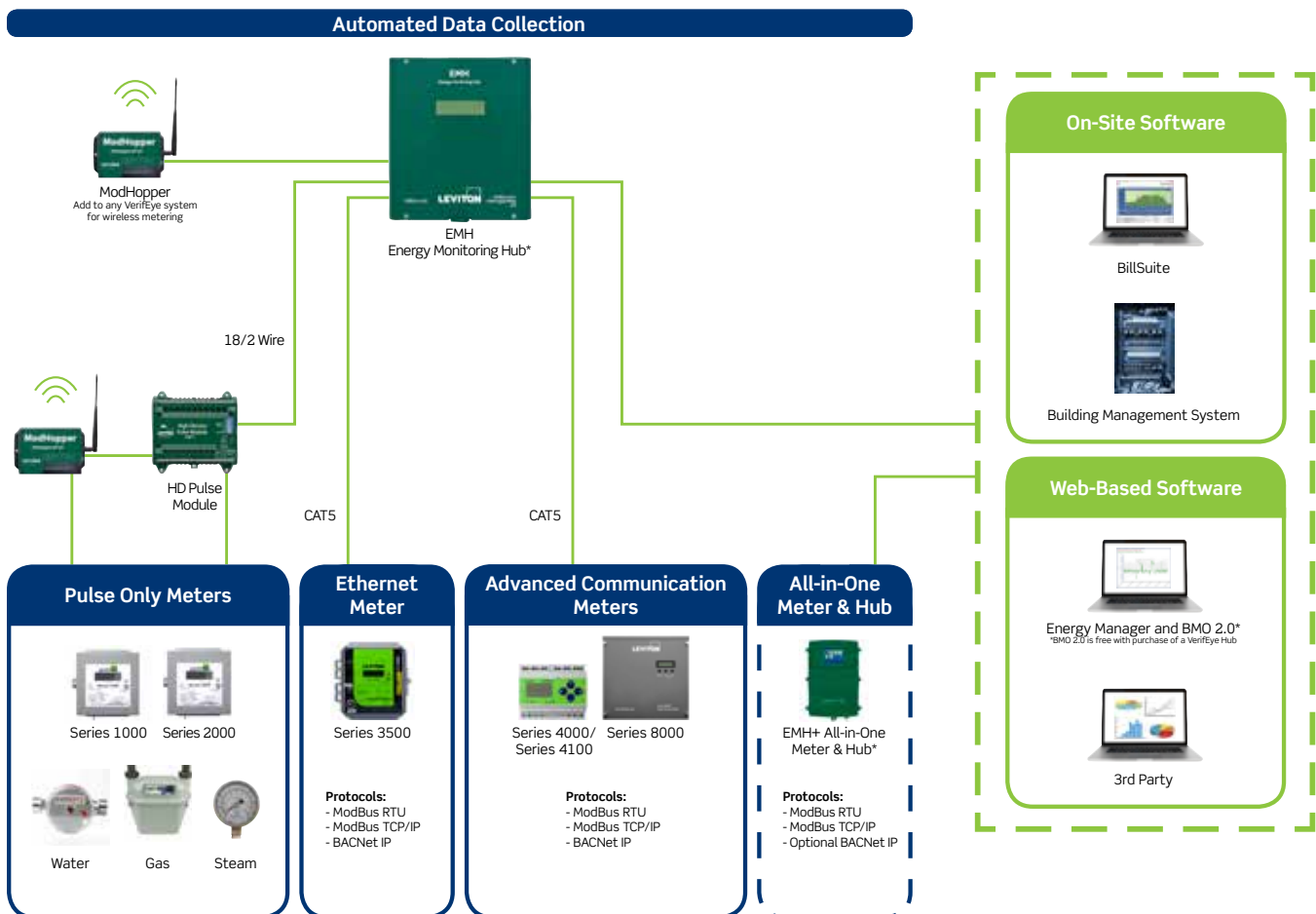
EXCELLENCE COMES STANDARD

- Open architecture design provides easy integration with third party building management system (BMS) platforms

- UL 916 Listed or recognized for Energy Monitoring Equipment and UL 61010 Electrical Equipment for Measurement and Control

- Installer friendly, reverse phase and power and load indicators provide installation diagnostics by visually confirming that the product is properly installed and functioning

- Leviton Series 1000, 2000 and 3500 meters are available in an indoor steel or outdoor NEMA 4X enclosure at the same low price

- Leviton Series 4000 and 4100 meters are available in an indoor DIN Rail Mount or outdoor NEMA 4X enclosure

- Leviton Series 4100 Bi-Directional ModBus RTU and BACnet MS/TP Meter allows for measurement of power imported from the utility grid as well as power exported from renewable energy sources

- VerifEye offerings include a wide range of meters to meet the needs of any application. Automated data collection solutions and energy reporting and analysis software to easily and intelligently manage energy consumption

- Solutions are confidently backed by a best in the industry 5 year warranty

LEVITON METERING PHILOSOPHY

Consultative Approach - Each project is tailored to each customer's needs - from a basic meter hardware system to an advanced communication system that includes BAS/BMS integration

Scalable System - Options for future upgrades and additions are available with Leviton's flexible solution—no need to purchase an entire new system

Open Protocol - Ease of communication with the use of Leviton AMR and Automated Metering (AMR) and Data Acquisition Hub (DAS) equipment

Automated Data Collection

ModHopper
Add to any VerifEye system
for wireless metering

EMH
Energy Monitoring Hub*

18/2 Wire

HD Pulse Module

CAT5

CAT5

On-Site Software

BillSuite

Building Management System

Web-Based Software

Energy Manager and BMO 2.0*
*BMO 2.0 is free with purchase of a VerifEye Hub

3rd Party

Pulse Only Meters	Ethernet Meter	Advanced Communication Meters	All-in-One Meter & Hub
Series 1000 Series 2000	Series 3500	Series 4000/ Series 8000 Series 4100	EMH+ All-in-One Meter & Hub*
Water Gas Steam	**Protocols:** - ModBus RTU - ModBus TCP/IP - BACNet IP	**Protocols:** - ModBus RTU - ModBus TCP/IP - BACNet IP	**Protocols:** - ModBus RTU - ModBus TCP/IP - Optional BACNet IP

*BMO 2.0 is FREE with purchase of a VerifEye hub

VERIFEYE METERS

MMU	Mini Meter Flush Mount	0.5% Mini Meter	Mini Meter Outdoor	Series 8000	EMH+ All-In-One Meter & Hub**

	Residential		Residential/Commerical	
Specifications	**Mini Meter™ Kits**	**0.5% Mini Meter Kits**	**Series 8000 Multiple Point High Density Meter**	**EMH+ All-In-One Meter & Hub****
	kWh Meter		**kWh Meter**	
Phase/Wiring	1PH 3W		1PH 2W 1PH 3W WYE 3PH 3W Delta 3PH 4W WYE	3PH 3W Delta 3PH 3W WYE 1PH 2W 3PH 4W WYE
Voltage Configurations	120/208/240		120/208 120/240 240/416 277/480 480*	208-480 120, 240, 277
Amperages	100-200A	200A	100-5000A	100-5000A
Measuring Parameters	kWh		Meter Totals: kWh, kVARh, kW, kVAR, kVA, Voltage L-L, L-N, Current, Power Factor Frequency Per Phase: Voltage L-L, L-N, Current, Power, Power Factor	
Communications Protocol (Standard)	Isolated Pulse Output	Embedded line powered AMR equipment, wireless network	ModBus TCP ModBus RTU (RS-485) BACnet IP	ModBus/RTU, ModBus/TCP, TCP/IP, PPP, HTTP/HTML, FTP, NTP, XML, SNMP-Trap. Optional BACnet/IP
Current Transformers Options	Split Core Solid Core	Solid Core	Split Core Solid Core	
Enclosure Options	**OEM Module** **Indoor** Plastic Flush Mount NEMA 1 **Outdoor** NEMA 4X **MMU** NEMA 4X	**Indoor** Flush Mount **Indoor** Surface Mount	**Indoor** JIC Steel NEMA1	**Indoor** Plastic Surface Mount
Display Type	LCD or Mechanical Counter	LCD	Local LCD, Scroll	LCD
Accuracy	C12.10 +/- 0.5% with paired CTs	C12.20 0.5% with paired CTs	C12.20 +/- 0.5%	C12.1 1% +/- 0.5% from 2% to 100% of full scale
Multiple Meter Unit (MMU) Configurations	Medium, 2-4 Meters Large, 5-8 Meters Extra-Large, 9-19 Meters	—	3PH, 8 points 2PH, 12 points 1PH, 24 points	—
Data Storage	Last Reading - Cumulative		Last Reading - Cumulative Data in 15 min Intervals	Last reading - 1 to 60 min, User Selectable (default 15 min)

* With potential transformer - consult factory for availability.
**VerifEye BMO 2.0 software is included at no cost with purchase of any VerifEye Data Acquisition Hub

VerifEye™ Smart Submetering Solutions

	Commercial				Commercial and Industrial
	Series 1000 Single Phase Meter Kits	**Series 2000 Three Phase Meter Kits**	**Series 3500 Multi-Function Ethernet Meter Kits**	**Series 4000 Industrial ModBus Meter Kits**	**Series 4100 Industrial ModBus RTU Meter Kits**
	kWh Meter with Optional Demand		Advanced kWh Meter with Communication		
Phase/Wiring	1PH 2W	1PH 3W	3PH 4W WYE	3PH 3W Delta 3PH 4W WYE	3PH 3W/4W
Voltage Configurations	120 277	120/208 120/240 277/480	120/208 277/480	Universal Voltage (120-480)	Universal Voltage (90-600)
Amperages	100-800A		100-1200A	100-5000A	Split Core: 100, 200, 400, 800A Rogowski: 20-5000A
Measuring Parameters	kWh Optional kW (peak demand reset)			kWh kW (peak demand reset) Meter Totals: kVAR, kVA, Power Factor & kW By Phase: Volts, Watts, Amps, Power Factor, Interval Data	Meter Totals:kVARh, kW, kVAR, kVA, Voltage L-L, L-N, Current, Power Factor, Frequency
Communications Protocol (Standard)	Isolated Pulse Output			Isolated Pulse Output Ethernet ModBus TCP/IP BACnet IP	ModBus/RTU Isolated Pulse Output	ModBus/RTU and BACnet MS/TP
Current Transformers Options	Split Core Solid Core				0.333V secondary output only Split Core Rogowski Coil: lengths available in 12", 18" and 24"
Enclosure Options	**Indoor** JIC Steel NEMA 1 **Outdoor** NEMA 4X	**Indoor** JIC Steel NEMA 1 **Outdoor** NEMA 4X **MMU** JIC Steel NEMA 1	**Indoor** JIC Steel NEMA 1 **Outdoor** NEMA 4X	**Indoor** DIN Rail Mount **Outdoor** NEMA 4X	
Display Type	Local LCD		Local LCD, Scroll		
Accuracy	+/- 0.5%			C12.20 / 0.5%	
Multiple Meter Unit (MMU) Configurations	—	Medium, 2-4 Meters Large, 5-8 Meters Extra-Large, 9-16 Meters	—		
Data Storage	Last Reading - Cumulative Peak Demand with Key Reset (optional)		Last Reading - Cumulative Peak Demand with Key Reset Data in 15 min Intervals	Last Reading - Present and Peak Demand for kW and kVAR	

VeriEEye™ Smart Submetering Solutions

MINI METER™

EQUITABLE TENANT BILLING

Some multi-tenant residential properties include energy costs in rental fees and generally charge tenants for energy based on the square footage occupied. To be truly equitable, tenants should pay only for what they actually use. With Leviton Mini Meters, building managers can easily track and allocate energy usage costs fairly to multiple tenants, as well as recoup energy expenses from common-use areas (parking lots, hall lighting, etc.). Tenants benefit by paying only for the energy they use; and when they focus on conserving energy, they can see direct financial benefits from their efforts.

- kWh Meter
- 120V 1PH 2W and 120/208/240V 1PH 3W
- 100-200 Amps
- Pulse Output - standard feature
- Available in indoor flush mount or surface mount enclosure
- Available in NEMA 4X indoor/outdoor individual meter enclosures and Multiple Meter Units (MMUs) from 2 to 19 meters
- Select surface mount and flush mount models include built in tamper-proof switch or built-in wireless AMR and temperature sensing capabilities
- Revenue grade accuracy: 0.5% accuracy class
- Use with split core or solid core CTs
- Up to three sets of CTs per phase can be paralleled per meter with no multipliers
- Components of Mini Meter Kits are UL/cUL Listed Energy Usage Monitor per CCN FTRZ

Indoor Flush Mount
Mini Meter

Indoor Surface Mount
Mini Meter

Outdoor
Mini Meter

MINI METER KITS

Note: Kits include meter, specified enclosure and required current transformers

MINI METER KITS - INDOOR FLUSH MOUNT ENCLOSURE

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
120/208V 3W or 120/240V 1PH 3W (Split Phase)	100A	2 SOLID CTs	MK240-1SW
	200A		MK240-2SW

MINI METER KITS - OUTDOOR ENCLOSURE

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
120/208V 3W or 120/240V 1PH 3W (Split Phase)	100A	2 SOLID CTs	MO240-1SW
	200A		MO240-2SW
120/208V 2PH 3W or 120/240V 1PH 3W (Split Phase)	100A	2 Split CTs	MO240-01W
	200A		MO240-02W

0.5% MINI METER KITS - INDOOR FLUSH MOUNT ENCLOSURE*

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
120/208/240V 1PH 3W	200A	2 SOLID CTs	6P201-C02
120/208/240V 1PH 3W with AMR (includes Time of Use (TOU) Enabled kWh Transceiver and Tamper Proof Switch)			6W201-C02
120/208/240V 1PH 3W with AMR (includes Time of Use (TOU) and Temperature Enabled kWh Transceiver and Tamper Proof Switch)			6W201-D02
120/208/240V 1PH 3W (includes Time of Use (TOU) and Delta Temperature Enabled kWh Transceiver and Tamper Proof Switch)			6W201-E02
120/208/240V 1PH 3W (OEM Module Kit)			7H201-S02

0.5% MINI METER KITS - INDOOR SURFACE MOUNT ENCLOSURE*

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
120/208/240V 1PH 3W with AMR	200A	2 SOLID CTs	6PSMT-C02
120/240V 1PH 3W (includes Time of Use [TOU] enabled kWh Transceiver and Tamper Proof Switch)			MMSMT-C02
120/240V 1PH 3W with AMR (includes Time of Use [TOU] and Temperature enabled kWh Transceiver and Tamper Proof Switch)			MMSMT-D02
120/240V 1PH 3W with AMR (includes Time of Use [TOU] and Temperature enabled kWh Transceiver and Tamper Proof Switch)			MMSMT-E02

WIRELESS REPEATER

DESCRIPTION	CAT. NO.
Repeater, 5V, includes 5VDC 1A plug-in power supply and internal backup battery	T101R-05V

WIRELESS DATA CONCENTRATING ACCESS POINTS (DCAPS)**

DESCRIPTION	CAT. NO.
Data Concentrating Access Point (DCAP), Low Capacity (150 meter points max), built-in radio receiver	T201E-151
DCAP, High Capacity (1000 meter points max), built-in radio receiver	T201E-102

*For a complete wireless Automatic Meter Reading (AMR) system, data transceivers and other wireless network components (DCAPs and Repeaters) are required as dictated by building construction.
TOU = Time of Use, providing 15-minute time-stamped kWh interval data
**All DCAPs and Gateways shipped with 6VDC, minimum 1.5 Amp power supply, Ethernet cable and USB cable

MULTIPLE METER UNITS (MMUS)

Leviton Multiple Meter Units (MMUs) come pre-wired per project configuration sheets with clearly labeled connections, minimizing the electrical installation time. All VerifEye MMUs are UL listed assemblies. Choose from an indoor steel model in 4/8/16 unit single- or three-phase configurations utilizing Series 2000 meters or a weatherproof outdoor enclosure in 4/8/19 unit single-phase configurations utilizing Mini Meters. All MMUs are customizable and field upgradable for individual projects. Each meter order requires submittal of a Configuration Form. Go to leviton.com/verifeye for more information.

MINI METER MMUS

VOLTAGE	DESCRIPTION	CAT. NO.
MEDIUM MINI METER MMU, 2-4 METERS		
120/240V 1PH 3W	2 Dual Element Meters	6M202-CFG
	3 Dual Element Meters	6M203-CFG
	4 Dual Element Meters	6M204-CFG
120/208V 3PH 4W	2 Dual Element Meters	6M302-CFG
	3 Dual Element Meters	6M303-CFG
	4 Dual Element Meters	6M304-CFG

LARGE MINI METER MMU, 5-8 METERS		
120/240V 1PH 3W	5 Dual Element Meters	6L205-CFG
	6 Dual Element Meters	6L206-CFG
	7 Dual Element Meters	6L207-CFG
	8 Dual Element Meters	6L208-CFG
120/208V 3PH 4W	5 Dual Element Meters	6L305-CFG
	6 Dual Element Meters	6L306-CFG
	7 Dual Element Meters	6L307-CFG
	8 Dual Element Meters	6L308-CFG

EXTRA-LARGE MINI METER MMU, 9-19 METERS, NEMA 4X ENCLOSURE		
120/240V 1PH 3W	9 Dual Element Meters	6X209-CFG
	10 Dual Element Meters	6X210-CFG
	11 Dual Element Meters	6X211-CFG
	12 Dual Element Meters	6X212-CFG
	13 Dual Element Meters	6X213-CFG
	14 Dual Element Meters	6X214-CFG
	15 Dual Element Meters	6X215-CFG
	16 Dual Element Meters	6X216-CFG
	17 Dual Element Meters	6X217-CFG
	18 Dual Element Meters	6X218-CFG
	19 Dual Element Meters	6X219-CFG
120/208V 3PH 4W	9 Dual Element Meters	6X309-CFG
	10 Dual Element Meters	6X310-CFG
	11 Dual Element Meters	6X311-CFG
	12 Dual Element Meters	6X312-CFG
	13 Dual Element Meters	6X313-CFG
	14 Dual Element Meters	6X314-CFG
	15 Dual Element Meters	6X315-CFG
	16 Dual Element Meters	6X316-CFG
	17 Dual Element Meters	6X317-CFG
	18 Dual Element Meters	6X318-CFG
	19 Dual Element Meters	6X319-CFG

SERIES 2000 MMUS

VOLTAGE	DESCRIPTION	CAT. NO.
MEDIUM SERIES 2000 MMU, 2-4 METERS		
120/208V 3PH 4W	2 Three Element Meters	2M202-CFG
	3 Three Element Meters	2M203-CFG
	4 Three Element Meters	2M204-CFG
277/480V 3PH 4W	2 Three Element Meters	2M402-CFG
	3 Three Element Meters	2M403-CFG
	4 Three Element Meters	2M404-CFG

LARGE SERIES 2000 MMU, 5-8 METERS		
120/208V 3PH 4W	5 Three Element Meters	2L205-CFG
	6 Three Element Meters	2L206-CFG
	7 Three Element Meters	2L207-CFG
	8 Three Element Meters	2L208-CFG
277/480V 3PH 4W	5 Three Element Meters	2L405-CFG
	6 Three Element Meters	2L406-CFG
	7 Three Element Meters	2L407-CFG
	8 Three Element Meters	2L408-CFG

EXTRA-LARGE SERIES 2000 MMU, 9-16 METERS, NEMA 4X ENCLOSURE		
120/208V 3PH 4W	9 Three Element Meters	2X209-CFG
	10 Three Element Meters	2X210-CFG
	11 Three Element Meters	2X211-CFG
	12 Three Element Meters	2X212-CFG
	13 Three Element Meters	2X213-CFG
	14 Three Element Meters	2X214-CFG
	15 Three Element Meters	2X215-CFG
	16 Three Element Meters	2X216-CFG
277/480V 3PH 4W	9 Three Element Meters	2X409-CFG
	10 Three Element Meters	2X410-CFG
	11 Three Element Meters	2X411-CFG
	12 Three Element Meters	2X412-CFG
	13 Three Element Meters	2X413-CFG
	14 Three Element Meters	2X414-CFG
	15 Three Element Meters	2X415-CFG
	16 Three Element Meters	2X416-CFG

Mini Meter
Multiple Meter Unit (MMU)

Series 2000
Multiple Meter Unit (MMU)

SERIES 8000 MULTI-POINT HIGH DENSITY METERS

The Series 8000 Multi-Point High Density Meters are designed to meter high density applications such as multi-tenant office and residential buildings, medium-sized retail stores, institutional facilities and branch circuit monitoring. For easy data accessibility, the Series 8000 design is based on an open protocol network to transmit data over ModBus and BACnet. Combining revenue-grade electrical submetering with building automation communications technology, the Series 8000 complies with all regulatory electric safety and communications requirements and meets stringent ANSI 0.5 % Accuracy Class standards.

- Allows for revenue grade metering of up to 24 individual circuits in one device

- Monitors up to 24 current transformers:
  - 8 circuits, 3 phase loads
  - 12 circuits, 2 phase loads
  - 24 circuits, 1 phase loads

- Branch circuit monitoring

- 100-5,000 Amp current transformers

- Native communications protocol—ModBus TCP, ModBus RTU (RS-485) and BACnet IP standard

- Measures kW hours, kW demand, volts, amps

- Interval and net metering

- Configurable via Ethernet or ModBus RTU network to BMS or VerifEye software solutions for tenant billing or measurement & verification (M&V)

Series 8000 Meter

SERIES 8000 MULTI-POINT HIGH DENSITY METERS

VOLTAGE	DESCRIPTION	CAT. NO.
RESIDENTIAL		
120/208/240V	Phase Config 3x2 with Wiring Harness	S8120-032
120/208/240V	Phase Config 6x2 with Wiring Harness	S8120-062
120/208/240V	Phase Config 9x2 with Wiring Harness	S8120-092
120/208/240V	Phase Config 12x2 with Wiring Harness	S8120-122
120/208V	Phase Config 8x3 with Terminal Strips	S8UTS-083
120/208V	Phase Config 12x2 with Terminal Strips	S8UTS-122
120/208V	Phase Config 24x1 with Terminal Strips	S8UTS-241
120/208V	Phase Config 8x3 with Wiring Harness	S8UWH-083
120/208V	Phase Config 12x2 with Wiring Harness	S8UWH-122
120/208V	Phase Config 24x1 with Wiring Harness	S8UWH-241

COMMERCIAL & INDUSTRIAL		
277/480V	Phase Config 8x3 with Terminal Strips	277TS-083
277/480V	Phase Config 12x2 with Terminal Strips	277TS-122
277/480V	Phase Config 24x1 with Terminal Strips	277TS-241
277/480V	Phase Config 8x3 with Wiring Harness	277WH-083
277/480V	Phase Config 12x2 with Wiring Harness	277WH-122
277/480V	Phase Config 24x1 with Wiring Harness	277WH-241

POTENTIAL TRANSFORMER (OPTIONAL)		
480V Delta	Delta PTs with Enclosure	S480V-011

CHOOSING BETWEEN A WIRING HARNESS AND TERMINAL STRIPS

- **Wiring harnesses offer a less labor intensive solution when all CTs are located in one panel** like in a multi-family high rise project. This eliminates the need to extend CT wires out of the panel.

- **Terminal strips are ideal for installers who prefer to land each wire and not use a color-coded wiring harness**. For CTs located in different panels or different locations with a switchboard, terminal strips offer an easier solution with the ability to extend the current transformer wiring back to the meter location for termination. Terminal strip models also carry a slightly higher cost and should be considered with the project budget.

SERIES 1000 SINGLE PHASE METERS

- kWh meter with optional Peak Demand functionality (includes Reset Key)
- 100 - 800 Amps
- Isolated Pulse output - standard feature
- Large LCD Display
- Revenue grade accuracy: 0.5% accuracy class
- Use with split core or solid core CTs

SERIES 1000 SINGLE PHASE METER KITS
Note: Kits include meter, specified enclosure and required current transformers

INDOOR ENCLOSURE

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
120V 1PH 2W	100	1 Split CT	1K120-01W
	200		1K120-02W
	400		1K120-04W
	800		1K120-08W
	100	1 SOLID CT	1K120-1SW
	200		1K120-2SW
120/208V 1PH 3W or 120/240V 1PH 3W (Split Phase)	100	2 Split CTs	1K240-01W
	200		1K240-02W
	400		1K240-04W
	800		1K240-08W
	100	2 SOLID CTs	1K240-1SW
	200		1K240-2SW
277V 1PH 2W	100	1 Split CT	1K277-01W
	200		1K277-02W
	400		1K277-04W
	800		1K277-08W
	100	1 SOLID CT	1K277-1SW
	200		1K277-2SW

OUTDOOR ENCLOSURE

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
120V 1PH 2W	100	1 Split CT	1O120-01W
	200		1O120-02W
	400		1O120-04W
	800		1O120-08W
120/208V 1PH 3W or 120/240V 1PH 3W (Split Phase)	100	2 Split CTs	1O240-01W
	200		1O240-02W
	400		1O240-04W
	800		1O240-08W
277V 1PH 2W	100	1 Split CT	1O277-01W
	200		1O277-02W
	400		1O277-04W
	800		1O277-08W

SERIES 2000 THREE PHASE METERS

• kWh meter with optional Peak Demand functionality (includes Reset Key)

• 120/208V or 277/480V 3PH 4W WYE only

• 100 - 1200 Amps

• Isolated Pulse output—standard feature

• Large LCD Display

• Revenue grade accuracy: 0.5% accuracy class

• Use with split core or solid core CTs

SERIES 2000 THREE PHASE METER KITS

Note: Kits include meter, specified enclosure and required current transformers

INDOOR ENCLOSURE

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
120/208V 3PH 4W WYE kWh Meter	100	3 Split CTs	2K208-01W
	200		2K208-02W
	400		2K208-04W
	800		2K208-08W
	1200		2K208-12W
	100	3 SOLID CTs	2K208-1SW
	200		2K208-2SW
277/480V 3PH 4W WYE kWh Meter	100	3 Split CTs	2K480-01W
	200		2K480-02W
	400		2K480-04W
	800		2K480-08W
	1200		2K480-12W
	100	3 SOLID CTs	2K480-1SW
	200		2K480-2SW
120/208V 3PH 4W WYE Demand Meter	100	3 Split CTs	2K208-01D
	200		2K208-02D
	400		2K208-04D
	800		2K208-08D
	1200		2K208-12D
277/480V 3PH 4W WYE Demand Meter	100		2K480-01D
	200		2K480-02D
	400		2K480-04D
	800		2K480-08D
	1200		2K480-12D

OUTDOOR ENCLOSURE

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
120/208V 3PH 4W WYE kWh Meter	100	3 Split CTs	2O208-01W
	200		2O208-02W
	400		2O208-04W
	800		2O208-08W
	1200		2O208-12W
277/480V 3PH 4W WYE kWh Meter	100		2O480-01W
	200		2O480-02W
	400		2O480-04W
	800		2O480-08W
	1200		2O480-12W

SERIES 3500 MULTI-FUNCTION ETHERNET METERS

- Communications Protocol
  - ModBus TCP/IP or BACnet IP
  - Isolated pulse output
  - Ethernet

- Universal voltage for 120-480V

- Measured Parameters
  - Total Meter:
    - kWh/kW
    - kVAh
    - kVA and kVAR
    - Power Factor
    - Line Frequency
  - Per Phase:
    - Voltage L-N
    - Current
    - Watts
    - VA, VAR
    - Power Factor
    - Voltage L-L

- Large LCD display with scroll feature

- Revenue grade accuracy: 0.5% accuracy class

- Installation diagnostics

- Low voltage detection

- Real time clock with battery backup for TOU reading

- Use with split core or solid core CTs

- Indoor JIC steel and outdoor (NEMA 4X) enclosure options

- UL/cUL Listed Energy Usage Monitor per CCN FTRZ

Series 3500
Outdoor Meter

SERIES 3500 METER KITS

INDOOR ENCLOSURE

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
208-480V AC 3P 3W/4W ModBus TCP/ BACnet IP	100	3 Split CTs	3KUMT-01M
	200		3KUMT-02M
	400		3KUMT-04M
	800		3KUMT-08M
	1600		3KUMT-16M
	3000		3KUMT-30M
	5000		3KUMT-50M
	100	3 SOLID CTs	3KUMT-1SM
	200		3KUMT-2SM
	400		3KUMT-4SM

OUTDOOR ENCLOSURE

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
208-480V AC 3P 3W/4W (with BACnet)	100	3 Split CTs	3OUMT-01M
	200		3OUMT-02M
	400		3OUMT-04M
	800		3OUMT-08M
	1600		3OUMT-16M
	3000		3OUMT-30M
	5000		3OUMT-50M
	100	3 Solid CTs	3OUMT-1SM
	200		3OUMT-2SM
	400		3OUMT-4SM

NOTE: Kits include meter, specified enclosure and required current transformers

SERIES 4000 INDUSTRIAL MODBUS METER KITS

Series 4000 Industrial ModBus Meter Kits are revenue-grade (ANSI C12.20 Class 0.5%) kWh electrical meters. The Series 4000 Kits include a DIN rail mount, 3-phase, advanced communication meter with split core or flexible rope-style Rogowski CTs for compact or irregular shaped conductors. Combinations of serial communication, pulse output and phase alarms are provided to suit a wide variety of applications.

- Industrial Temperature Range of -22-158°F (30-70°C)

- Energy monitoring for AMR/BAS/BMS/EMS systems

- DIN Rail mount for easy installation

- Options for 100, 200, 400 and 800A Split Core CTs and Rogowski CTs (20-5000A)

- ANSI 12.20 0.2% accuracy, IEC 62053-22 Class 0.2S

- Real energy output and phase loss alarm output

- One device serves multiple locations

- User-enabled password protection to protect meter from tampering

- Bright, backlit LCD for installation in dark areas and viewing real time data

- System integration via ModBus RTU- RS-485 2-wire with shield

- 90-600VAC (50/60Hz) versatility including 347V (L-N) and 600V (L-L) with fewer models to stock

Series 4000 DIN Rail Mount

Series 4000 Outdoor NEMA Enclosure

VerifEye™ Smart Submetering Solutions

SERIES 4000 MODBUS METER KITS

INDOOR DIN RAIL MOUNT

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
Universal 3PH 3W/4W	100	Split Core CTs	4KUMR-01M
	200		4KUMR-02M
	400		4KUMR-04M
	800		4KUMR-08M
	20-5000	12" Rogowski Coil CTs	4KUMR-R12
	20-5000	18" Rogowski Coil CTs	4KUMR-R18
	20-5000	24" Rogowski Coil CTs	4KUMR-R24

STANDALONE METERS ONLY

Universal 3PH 3W/4W	100, 200, 400, 800	Split Core CTs Only	4KUMR-00M
Universal 3PH 3W/4W	20-5000	Rogowski Coil CTs Only	4KUMR-00R

OUTDOOR NEMA ENCLOSURE

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
Universal 3PH 3W/4W	100	Split Core CTs	4OUMR-01M
	200		4OUMR-02M
	400		4OUMR-04M
	800		4OUMR-08M
	20-5000	12" Rogowski Coil CTs	4OUMR-R12
	20-5000	18" Rogowski Coil CTs	4OUMR-R18
	20-5000	24" Rogowski Coil CTs	4OUMR-R24

COMPONENTS

AMPS	DESCRIPTION	CAT. NO.
100	Split Core CTs	CTV01-K21
200		CTV02-K21
400		CTV04-K40
800		CTV08-K40
—	Fuse Pack, 1/2A, 600VAC, slow blow	CTV00-FK3
20-5000	12" Rogowski Coil CTs	CRV50-K62
	18" Rogowski Coil CTs	CRV50-K93
	24" Rogowski Coil CTs	CRV50-KC2

SERIES 4100 BIDIRECTIONAL MODBUS RTU AND BACNET MS/TP METER KITS

The VerifEye Series 4100 Bidirectional ModBus RTU and BACnet MS/TP Meter Kits feature bidirectional monitoring specifically designed for renewable energy applications. The Series 4100 Meter Kits measure power imported from the utility grid and power exported from renewable energy source like solar panels. The Series 4100 Meter Kits are available in a standalone DIN rail mount or NEMA 4X enclosures and come with either split core or flexible rope-style Rogowski Current Transformers (CTs).

- Bidirectional monitoring

- Industrial temperature range: -22-158°F (-30-70°C)

- 50/60 Hz

- Options for 100, 200, 400, and 800A Split Core CTs and Rogowski CTs (20-5000A)

- DIN rail mount for easy installation

- One device serves multiple locations

- User-enabled password protection to protect meter from tampering

- Bright, backlit LCD for installation in dark areas and viewing real time data

- Energy monitoring for AMR/BAS/BMS/EMS systems

- Renewable energy applications

- System integration via ModBus RTU or BACnet MS/TP - RS-485 Serial

- CSI approval for California Solar Initiative

- 90-600V versatility including 347V with fewer models to stock

Series 4100 DIN Rail Mount

SERIES 4100 BIDIRECTIONAL METERING SOLUTION

SERIES 4100 BIDIRECTIONAL METERING SOLUTION—RENEWABLE ENERGY MONITORING
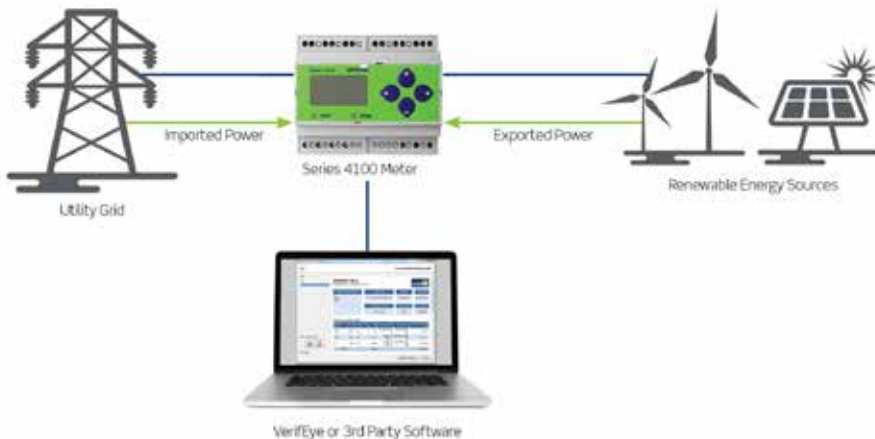
SERIES 4100 BIDIRECTIONAL MODBUS RTU AND BACNET MS/TP METER KITS

INDOOR DIN RAIL MOUNT MODBUS METER KITS

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
Universal 3PH 3W/4W ModBus RTU	100	Split Core CTs	4DUMR-01M
	200		4DUMR-02M
	400		4DUMR-04M
	800		4DUMR-08M
	20-5,000	12" Rogowski Coil CTs	4DUMR-12R
	20-5,000	18" Rogowski Coil CTs	4DUMR-18R
	20-5,000	24" Rogowski Coil CTs	4DUMR-24R

INDOOR DIN RAIL MOUNT BACNET MS/TP METER KITS

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
Universal 3PH 3W/4W BACnet MS/TP	100	Split Core CTs	4DUBM-01B
	200		4DUBM-02B
	400		4DUBM-04B
	800		4DUBM-08B
	20-5,000	12" Rogowski Coil CTs	4DUBM-12R
	20-5,000	18" Rogowski Coil CTs	4DUBM-18R
	20-5,000	24" Rogowski Coil CTs	4DUBM-24R

OUTDOOR NEMA ENCLOSURE - MODBUS METER KITS

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
Universal 3PH 3W/4W ModBus RTU	100	Split Core CTs	41OUM-01M
	200		41OUM-02M
	400		41OUM-04M
	800		41OUM-08M
	20-5,000	12" Rogowski Coil CTs	41OUM-12R
	20-5,000	18" Rogowski Coil CTs	41OUM-18R
	20-5,000	24" Rogowski Coil CTs	41OUM-24R

OUTDOOR NEMA ENCLOSURE - BACNET MS/TP METER KITS

VOLTAGE	AMPS	CTS INCLUDED	CAT. NO.
Universal 3PH 3W/4W BACnet MS/TP	100	Split Core CTs	41OUB-01B
	200		41OUB-02B
	400		41OUB-04B
	800		41OUB-08B
	20-5,000	12" Rogowski Coil CTs	41OUB-12R
	20-5,000	18" Rogowski Coil CTs	41OUB-18R
	20-5,000	24" Rogowski Coil CTs	41OUB-24R

EMH+ ALL-IN-ONE METER AND ENERGY MONITORING HUB*

The EMH+ All-In-One Meter and Energy Monitoring Hub combines an onboard revenue-grade power meter and Leviton Data Acquisition Hub in a flexible all-in-one package. This simple and effective energy solution can be used to meet energy codes and mandates and is ideal for new construction and commercial buildings.

- **Simplicity**—A complete metering system for any application

- **Easy to Install**—Reduces installation time and cost with integrated meter and data acquisition capabilities

- **More Features, Lower Cost**—Costs up to 30% less than other bundled meter and data acquisition devices

- **Scalable**—Employs other VerifEye solutions for future upgrades

- **Free Web-Based Software**—Uses free online energy data visualization BMO 2.0 software*

- Data Collection
   - Logs and collects data on user selected intervals
   - Non-volatile memory stores data until the next scheduled upload or manual download

- Compatible with VerifEye BMO 2.0 online software,* allowing users to quickly access energy consumption information from a web-based platform

- Tracks real-time energy usage for demand response programs

- Meter data can be transferred to energy dashboards, kiosks and software applications

- Up to 32 ModBus meters can be added downstream

- Supports BACnet IP and other protocols on one device

- Seamlessly integrates with BMS and BAS systems

- Monitors performance of critical systems such as lighting and HVAC

- Set alarms notifications for targeted levels and view graphical and historical data

EMH+ All-in-One Meter and Hub*

LCD TOUCH SCREEN FEATURES

- Similar SmartPhone layout

- System set up from touch screen

- View live data from the EMH+ and other associated meters

EMH+ INTEGRATED METER & ENERGY MONITORING HUB*

AMPS	CTS INCLUDED	CAT. NO.
100A		A8814-1S3
200A		A8814-2S3
300A		A8814-3S3
400A		A8814-4S3
600A	3 Split CTs	A8814-6S3
800A		A8814-8S3
1600A		A8814-163
3000A		A8814-303
5000A		A8814-503

*VerifEye BMO 2.0 software is included at no cost with the purchase of VerifEye EMH+ All-In-One Meter and Hub

CURRENT TRANSFORMERS

The better the equipment, the better the measurement. Leviton meters utilize highly accurate current transformers for revenue-grade performance certified to ANSI standards. Competing products use current sensors that do not provide the same level of performance. Leviton Meter Kits include Split Core, Rogowski, or Solid Core Current Transformers (CTs) for high-quality, long-term accuracy and reliability. For added safety, all Leviton current transformers come with built-in voltage suppression devices that prevent hazardous voltages from developing on CT secondaries should they become disconnected from a meter with load current present.

Compact and cost-effective solid core CTs slip over power lines to measure the electrical current flowing through the line. For solid core CT installation, power must be de-energized and the circuit opened, in order to slip the CT over the power line.

SOLID CORE—FOR USE WITH SERIES 8000 METERS, MINI METERS AND MMUS ONLY

AMP	DESCRIPTION	CAT. NO.
100:0.1A	Solid Core, 0.67", Black	CDE01-K11
	Solid Core, 0.67", Blue	CDE01-L11
	Solid Core, 0.67", Red	CDE01-R11
	Solid Core, 0.72", Black	CDA01-K12
	Solid Core, 0.72", Blue	CDA01-L12
	Solid Core, 0.72", Red	CDA01-R12
200:0.1A	Solid Core, 0.67", Black	CDE02-K11
	Solid Core, 0.67", Blue	CDE02-L11
	Solid Core, 0.67", Red	CDE02-R11
	Solid Core, 0.72", Black	CDA02-K12
	Solid Core, 0.72", Blue	CDA02-L12
	Solid Core, 0.72", Red	CDA02-R12
400:0.1A	Solid Core, 1.5", Black	CDF04-K24

Solid Core Current Transformers
100A, 200A, 400A available

SPLIT CORE—FOR USE WITH SERIES 1000, 2000, 3500, 8000 METERS AND SERIES 2000 (MMUS) ONLY

AMP	DESCRIPTION	CAT. NO.
100:0.1A	Split Core, .75" x .75"	CTD01-K16
200:0.1A	Split Core, 1" x 1"	CTD02-K16
400:0.1A	Split Core, 1.5", x 1.5"	CTD04-K23
800:0.1A	Split Core, 3" x 3.5"	CTC08-K46
1200:0.1A	Split Core, 4" x 6"	CTC12-K46
1600:0.1A	Split Core, 4" x 6"	CTC16-K96
3000:0.1A	Split Core, 5" x 7"	CTC30-57B**
5000:0.1A	Split Core, 5" x 7"	CTC50-57B**

Split Core Current Transformers
100A-5,000A available

SPLIT CORE—FOR USE WITH SERIES 4000 INDUSTRIAL MODBUS METER KITS ONLY

AMP	DESCRIPTION	CAT. NO.
100:0.333V	Split Core, 1.6" x 2.1"	CTV01-K21
200:0.333V	Split Core, 2.2" x 2.8"	CTV02-K21
400:0.333V	Split Core, 6" x 5.2"	CTV04-K40
800:0.333V	Split Core, 6" x 5.2"	CTV08-K40

Split Core Current Transformers
100A-800A available

ROGOWSKI COIL—FOR USE WITH SERIES 4000 INDUSTRIAL MODBUS METER KITS ONLY

AMP	DESCRIPTION	CAT. NO.
20-5000A	Rogowski Coil, 12"	CRV50-K62
	Rogowski Coil, 18"	CRV50-K93
	Rogowski Coil, 24"	CRV50-KC2

Rogowski Coil Current Transformer
20A-5,000A available

*Consult factory for availability.
System Accuracy: ±1% of reading from 10% to 100% of the rated current of the CTs, accomplished by matching the CTs with electronics and calibrating them as a system.

VERIFEYE COMMUNICATION PRODUCTS

Energy Monitoring Hub (EMH)	EMB Hub	EMB HubLite	High Density Pulse Module	Flex I/O Module	ModHopper

Specifications	Data Acquisition Hubs			Input/Output Module		Wired ModBus/ Pulse Transceiver
	Energy Monitoring Hub (EMH)*	EMB Hub*	EMB HubLite*	High Density Pulse Module*	Flex I/O Module*	ModHopper*
	A8812	A8810	A7810	A8911	A8332	R9120
Protocols	ModBus RTU ModBus TCP TCP/IP PPP HTTP/HTML FTP NTP XML SNMP-Trap BACnet IP		ModBus TCP TCP/IP PPP HTTP/HTML FTP NTP XML SNMP-Trap BACnet IP	ModBus RTU		
Applications	Use with an Ethernet (LAN) connection to push-or-pull data via HTTP, XML, FTP, or any custom protocol Connect to web-based (IP-based) software dashboards, energy information management systems and demand response systems			Use with EMH to take advantage of plug-in communication Use with ModHopper for wireless communication Push-or-pull meter data to VerifEye kiosks and software applications		Designed specifically for wireless submetering Collect meter data from multiple buildings over long distances "Self-managed" mesh network keeps system functioning with high reliability

HOW TO SELECT THE APPROPRIATE DATA ACQUISITION HUB

	ModBus TCP	ModBus RTU	4 Pulse Inputs Onboard	8 Flex Inputs On Board*	Configured for Leviton Energy Manager	Requires Separately Ordered Power Supply
A8812-001 EMH	X	X	-	X	X	-
A8812-000 EMH (non-configured)	X	X	-	X	-	-
A8810-000 EMB Hub	X	X	-	-	-	X
A7810-000 EMB HubLite	X	-	X	-	-	X

* Pulse, analog, status and resistive.

*VerifEye BMO 2.0 is free with purchase of a VerifEye Hub.

VerifEye™ Smart Submetering Solutions

METERING COMMUNICATIONS SYSTEMS

To create a data network between Leviton submeters and stakeholders (BAS, third party billing, Leviton Energy Manager software, etc.), Leviton offers Metering Communication Systems. These solutions transmit data from meters to end systems, creating a seamless transition between data collection and data display. Leviton Metering Communications Systems also enable facilities to create metering systems that can easily share data through open protocols such as ModBus, and IP-based data transfer through HTTP/FTP of .csv or XML files. The results are robust and reliable networks scalable to accommodate future expansion, with data made accessible from any internal or external location.

Energy Monitoring Hub*

DATA ACQUISITION HUBS
ENERGY MONITORING HUBS*

Data Acquisition Hubs, including the Energy Monitoring Hub (EMH), EMB and EMB HubLite are intelligent, flexible data acquisition servers allowing users to collect energy data from meters and environmental sensors. As an additional advantage, VerifEye BMO 2.0 online software is included at no cost with purchase of any VerifEye Data Acquisition Hub. Designed to connect to IP-based applications such as enterprise energy management, demand response and smart grid programs, Hub servers allow you to connect thousands of energy points, benchmark energy usage and reduce energy costs.

- Collects and logs data from connected wired or wireless devices based on user-set intervals
- Pushes or pulls data via HTTP, XML, FTP or any custom protocol using an Ethernet (LAN) connection
- No software required—information can be accessed through any web browser in any location
- Plug and play connectivity
- Compatible with nearly any front-end software platform allowing customers to use a variety of reporting tools
- Push or pull meter data to energy dashboards, kiosks and software applications
- Monitor performance of critical systems (lighting, HVAC, PDUs, inverters, etc.)

EMB Hub*

EMB HubLite*

DATA ACQUISITION HUBS*

DESCRIPTION	CAT. NO.
Energy Monitoring Hub—Configured for Leviton Energy Manager	A8812-001
Energy Monitoring Hub—Non-Configured	A8812-000
EMB Hub	A8810-000
EMB HubLite	A7810-000
Power Supply for EMB Hub and EMB HubLite	YBM05-010
Replacement power supply	YBM07-001

Refer to page 17 for the EMH+ Integrated Meter and Energy Monitoring Hub

*VerifEye BMO 2.0 is included at no cost with the purchase of any VerifEye Data Acquisition Hub.

INPUT/OUTPUT MODULES
HIGH DENSITY PULSE MODULE

The High Density Pulse Module provides a convenient way to expand a VerifEye metering system by connecting the HD Pulse Module to an Energy Monitoring Hub (EMH) and/or ModHopper for system expansion. The HD Pulse Module accepts up to 23 standard pulse sensors and can function as a slave device with any ModBus master. This data can easily be integrated to a network of other critical energy sensors to provide a comprehensive energy monitoring solution. The HD Pulse Module is ideal for applications with a high density of pulse output devices, giving users access to meters that would previously require multiple modules.

- External communications handled via shielded twisted pair 18-22 gauge wire allowing communication up to 4,000 ft and pulse input communications up to 200 ft using 18-24 gauge control wire
- DIN or wall mounting make installations quick and easy
- Device verification—LED indicators for each pulse input allow for fast indication and verification of pulses to reduce installation and troubleshooting time
- Non-volatile memory retains configuration and pulse count totals during power failures for reliable data collection and retention
- Easily add pulse meters to ModBus network for a scalable, open protocol solution
- Field upgradable firmware for user-friendly future upgrades and expansion

High Density Pulse Module

FLEX I/O MODULE

The Flex I/O Module is a cost-effective way to collect data from meters or sensors and bring the information into a ModBus network or energy monitoring system. As a stand-alone or bundled package, the Flex I/O Module can be incorporated with data acquisition and metering devices to provide a cost-effective energy monitoring solution. The Flex I/O Module is compatible with virtually any ModBus master, allowing customers the flexibility to use it in existing ModBus networks. Use with the VerifEye Energy Monitoring Hub (EMH).

- Easily add meters and sensors to the ModBus network
- 8x user selectable inputs
- 2X output relays for manual controls or pulse replication
- Non-volatile memory
- Industrial temperature range of -22-158°F (-30-70°C)
- LEDs for visual verification/status reduce installation and troubleshooting time
- Din or wall mount for easy installation
- Field upgradable firmware for user-friendly future upgrades and expansion

Flex I/O Module

INPUT/OUTPUT MODULES

DESCRIPTION	CAT. NO.
High Density Pulse Module, 23 Inputs	A8911-000
Flex I/O Module, 8 User Selectable Inputs, 2 Relay Outputs	A8332-000

WIRELESS MODBUS/PULSE TRANSCEIVER
MODHOPPER

The ModHopper is designed with breakthrough mesh technology that makes connecting ModBus RTU (RS-485) and pulse devices simple and cost effective. VerifEye BMO 2.0 is included at no cost with the purchase of any VerifEye Data Acquisition Hub as an additional advantage. Our "smart" ModHopper transceivers eliminate the need for costly wiring runs allowing users to wirelessly capture meter data in the most challenging retrofit and campus environments. Collect meter points in existing buildings with minimum down-time or disruption of day-to-day operations.

- Designed specifically for wireless metering and VerifEye submetering solutions for guaranteed compatibility
- No software or programming required and devices automatically configure when powered, reducing labor costs and installation time
- Wireless "mesh" network—self-healing, self-optimizing for ease of installation and maintenance
- Connect up to 32 ModBus and 2 pulse devices per ModHopper for the ultimate expandable solution
- Long distance communication (3,000 ft indoor/14 miles LOS Outdoors) for flexibility of placement and easier future expansion
- Multiple independent network capability
- Reliable, constant two-way communication and packet verification
- Point to multi-point communication
- Field upgradable firmware for user-friendly future upgrades and expansion

ModHopper

WIRELESS MODBUS/PULSE TRANSCEIVER

DESCRIPTION	CAT. NO.
ModHopper and Power Supply	R9120-500

NEMA COMMUNICATION BUNDLES

NEMA Communication Bundles combine VerifEye's Data Acquisition Products into one enclosure for a VerifEye-exclusive, all-in-one-bundled communication solution for indoor use. All VerifEye NEMA communication bundles have one part number and are factory pre-assembled for ease of ordering eliminating the need for field assembly.

ORDERING INFORMATION

DESCRIPTION	CAT. NO.
Energy Monitoring EMB Hub with Line Voltage Power Supply, NEMA 4X Enclosure	A8810-PS1
Energy Monitoring EMB HubLite with Line Voltage Power Supply, NEMA 4X Enclosure	A7810-PS1
HD Pulse Module with Line Voltage Power Supply, NEMA 4X Enclosure	A8911-PS1
Flex I/O Module with Line Voltage Power Supply, NEMA 4X Enclosure	A8332-PS1

VerifEye BMO 2.0 is included at no cost with the purchase of any VerifEye Data Acquisition Hub.

VERIFEYE SOFTWARE PRODUCTS

BillSuite

Building Manager Online (BMO) 2.0

Energy Manager

Specifications	Tenant Billing Software	Measurement & Verification (M&V) Software	
	BillSuite	**Building Manager Online 2.0 (BMO 2.0)***	**Energy Manager**
	LBSSW	**BMOSW**	**LEMS8**
Primary Functions	Automates the tenant billing process by eliminating manual meter readings	Allows users to quickly access energy consumption information via a web-based platform Plot charts and view data quickly without any custom software installed on a PC—simply log on to the BMO website	Analyzes, formats and reports data gathered from VerifEye Submetering Solutions Users log in to Energy Manager website and access data and reports in real-time
Key Features	Monitor energy consumption of each tenant or whole building on a 24/7 basis Meters can be in a basement, wire closet or individual unit Generate bills from any PC—requires Windows 7 or better Monthly and periodic billing reports for any or all VerifEye submeters Energy profile to identify peak demand and energy waste	Delivers simple graphical interface for plotting energy information and identifying anomalies and peak demand in near real time Uploads 15 min interval data and displays raw data in a line graph	Illustrates information in real time Includes an automatic reporting system and an instant alarm notification system Produces customized reports to suit precise requirements Collects information from 1 to 60 min intervals for in-depth tracking Reporting based on 15 min intervals
Key Benefits	Generate monthly electricity bills for each tenant, which reflect actual energy usage Improve cash flow and increase net operating income Eliminate uncertainty of variable utility costs Delegate energy usage accountability to tenants Improve tenant satisfaction, retention and property values Identify and fix energy waste, reducing overall costs	Investigate potential building problems and alarms easily Select date ranges to display information in intervals from one year to as little as an hour Export your 15 min interval data to .csv files Configure VerifEye HUB communication products remotely Add or change the data recording interval, alarm thresholds, even the device name Graph up to 4 different parameters for trending patterns	Identify cost saving measures that can lead to greater profitability Discover energy inefficiencies that may be difficult to see Establish baselines, budgets and allocation of energy use and cost within an enterprise to track and analyze goals and performance Develop responsible environmental goals and conservation measures while measuring and managing facility's carbon footprint Provide outstanding communication and support, enabling facilities to have the most advanced and intuitive energy management reporting in the industry

VerifEye™ Smart Submetering Solutions

*VerifEye BMO 2.0 is included at no cost with the purchase of any VerifEye Data Acquisition Hub.

VERIFEYE SOFTWARE
SAVE ENERGY, REDUCE COSTS, BE SUSTAINABLE

VerifEye software solutions provide simple, effective, turn-key solutions to monitor energy in real time. Designed to seamlessly integrate with VerifEye submetering hardware and communication systems, VerifEye software allows facilities to introduce smarter energy management strategies, saving money and resources.

VERIFEYE SOFTWARE INCLUDES:

- **Tenant Billing**
  - **BillSuite**—provides individual tenant billing capabilities to ensure accurate and complete recovery of tenant energy costs

- **Measurement & Verification (M&V)**
  - **Building Manager Online (BMO 2.0)**—web-based interval data collection software platform
  - **Energy Manager**—energy monitoring platform which interprets submeter data and exports real-time reports in selected time increments, stretching from hour-by-hour to year-by-year

TENANT BILLING SOFTWARE
MEASURE. MONITOR. MANAGE. BILL.

Generate billing based on actual tenant consumption. BillSuite is a PC based software program that provides individual tenant billing capabilities to ensure accurate and complete recovery of tenant energy costs. This software solution automates the tenant billing process by eliminating manual meter readings for simplified, more accurate measurement and verification. BillSuite collects energy consumption data from all meters on a periodic basis and generates energy bills, billing reports, energy profiles as well as graphs. Other submeters such as gas, water, BTU, etc. can be added to the tenant bill.

HOW VERIFEYE BILLSUITE TENANT BILLING SOFTWARE WORKS
SIMPLE, EFFECTIVE, TURN KEY SOLUTION TO MONITOR & BILL ENERGY USAGE

Leviton Submeters   Energy Monitoring Hub (EMH)*

BillSuite
(Data collection, monitoring, billing & reporting)
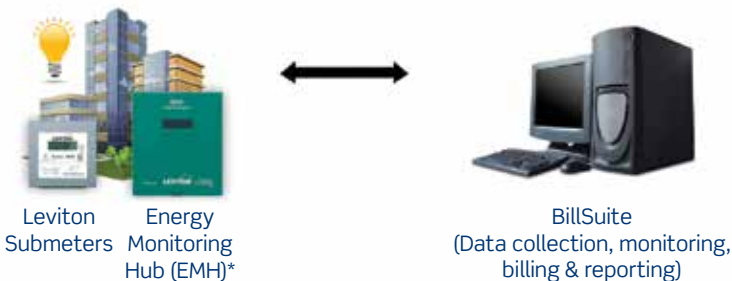
- **Meters** record *real-time* kWh and kW consumption data

- **Energy Monitoring Hub (EMH)** receives meter data and pushes it to BillSuite

- **BillSuite** collects data, generates individual tenant bills using customizable utility rates, and provides graphing and trending capabilities

- **User** logs into BillSuite and accesses billings and reports

*VerifEye BMO 2.0 is included at no cost with the purchase of any VerifEye Data Acquisition Hub.

VERIFEYE BILLSUITE FEATURES

- Monitor energy consumption of each tenant or whole building on a 24x7 basis

- Meters can be in a basement, wire closet or individual unit

- Billing of each tenant from the convenience of your PC

- Monthly and periodic billing reports for any or all meters

- Energy profile to identify peak demand and energy waste

BILLSUITE SOFTWARE

DESCRIPTION	CAT. NO.
BillSuite Software 1 - 50 Meters	LBSSW-01L
BillSuite Software 51 - 100 Meters	LBSSW-02L
BillSuite Software 101 - 200 Meters	LBSSW-03L
BillSuite Software 201 - 300 Meters	LBSSW-04L
BillSuite Software 301 - 400 Meters	LBSSW-05L
BillSuite Software 401 - 550 Meters	LBSSW-06L
BillSuite Software 551 - 750 Meters	LBSSW-07L
BillSuite Software 751 - 1000 Meters	LBSSW-08L

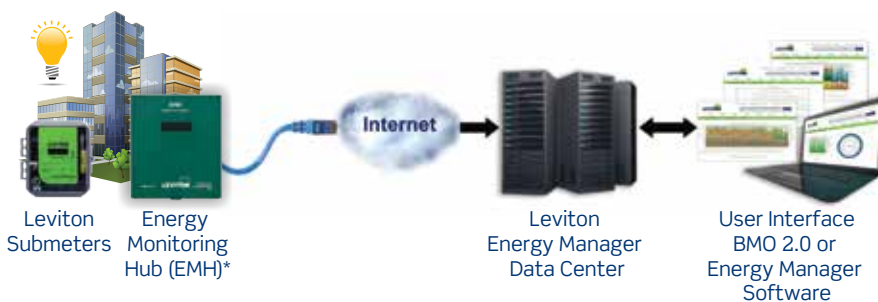15 min Interval Data

Tenant Energy Bill

MEASUREMENT & VERIFICATION (M&V) SOFTWARE

Energy monitoring and reporting is the key to measuring and managing energy efficiency and cost.

Decision-makers everywhere are turning to VerifEye Solutions to get the information they need to make smart energy choices. An advanced web based platform that provides real time data for your entire enterprise, VerifEye BMO 2.0 and Energy Manager deliver the most sophisticated tools to drive energy efficiencies, reduce operating costs and create more sustainable, environmentally sound facilities.

HOW VERIFEYE MEASUREMENT & VERIFICATION (M&V) SOFTWARE WORKS
SIMPLE, EFFECTIVE, TURN KEY SOLUTION TO MONITOR ENERGY IN REAL TIME

Leviton Submeters

Energy Monitoring Hub (EMH)*

Internet

Leviton Energy Manager Data Center

User Interface BMO 2.0 or Energy Manager Software

- **Meters** record *real time* consumption data

- **Energy Monitoring Hub (EMH)** receives meter data and pushes it to Energy Manager data center

- **Data Center** stores, manages and reports data in *real time*

- **Energy Manager** software analyzes, formats and reports the data

- **User** logs into Energy Manager website and accesses data and reports

*VerifEye BMO 2.0 is included at no cost with the purchase of any VerifEye Data Acquisition Hub.

VERIFEYE BUILDING MANAGER ONLINE (BMO 2.0)

• Leviton hosted software application—no software installation required

• Set alarms and view graphical and historical data in intervals ranging from one hour to one year

• Provides a daily view summary of load profiles to help identify high and low consumption days and visual daily trending patterns

• Shows the effects of energy conservation measures by tracking load profiles over a given time period

• Quickly view any building or end-user for a summary of operating parameters

• Export data to spreadsheets for analysis (.csv files)

• Plot charts to show trends and provide analytical charts with demand profiling

• Select date ranges to display information

• Copy and paste graphs into your own reports with BMO's convenient legends

VerifEye BMO 2.0 is included at no cost with purchase of any VerifEye Data Acquisition Hub.

ENERGY MANAGER SOFTWARE

- Simplified, easy to use with intuitive drilldown functionality
- Identify cost saving measures that can lead to greater profitability
- Discover energy inefficiencies that may be difficult to see
- Establish baselines, budgets and allocation of energy use & costs within an enterprise
- Measure and monitor the enterprise's carbon footprint
- Enhance LEED certification ratings with credits for measuring, monitoring and verification
- Adopt best business practices for efficient energy use
- Track and trend consumption and site performance versus goals
- Highlight maintenance issues - identify sites and equipment that need immediate attention
- Trend, compare and validate utility bills
- Provide outstanding communication and support enabling your operations and management personnel to have the most advanced, intuitive energy management reporting at their fingertips in just 3 clicks!
  - Real-time Report
  - Weekly Report
  - Monthly Report
  - Annual Report
  - Carbon Emissions Report
  - Daily Report
  - Weekly Profile Report
  - Monthly Profile Report
  - Comparison Report
  - Energy Center Report

Annual Report

Multiple Meter Analysis Report

Energy Center Report

Carbon Emissions Report

ENERGY MANAGER SOFTWARE

YEAR ONE

Energy Manager Software - Base License Program - includes (8) control points and (1) user account	LEMSB-000
Energy Manager Software - Base License Program - includes EMH (ModBus/RS-485, Ethernet, No Modem), (8) Flex Inputs, (8) control points and (1) user account	LEMS8-812
Energy Manager Software - Specifier Version - includes (8) control points and (1) user account	LEMSS-000
Energy Manager Software - Specifier Version - includes EMH (ModBus/RS-485, Ethernet, No Modem), (8) Flex Inputs, (8) control points and (1) user account	LEMS9-812
Energy Manager Software - Additional User Account	LEMSU-000
Energy Manager Software - Additional Points License - includes (8) control points	LEMSP-000

ANNUAL RENEWAL

Energy Manager Software - Base License Program Renewal – includes (8) control points and (1) user account	LEMSB-R00
Energy Manager Software – Specifier Version Renewal – includes (8) control points and (1) user account	LEMSS-R00
Energy Manager Software – Additional User Account Renewal	LEMSU-R00
Energy Manager Software - Additional Points License Renewal – includes (8) control points	LEMSP-R00

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