



Integral submetering solution eliminates the need for separate enclosures! Patent #6,373,238



H8035/8036 Series

Enercept® Networked Power Meters (Modbus® RTU)

Applications

- Energy management & performance contracting
- Submetering for commercial tenants
- Activity based costing in commercial and industrial facilities
- Real-time power monitoring

The world's most cost-effective meter

- Monitor energy parameters (kW, kWh, kVAR, PF, Amps, Volts) at up to 63 locations on a single RS-485 network...greatly reduces wiring time and cost
- Fast split-core installation eliminates the need to remove conductors
- Precision metering electronics and current transformers in a single package—reduces the number of installed components— huge labor savings
- Smart electronics eliminate CT orientation concerns—fast trouble-free installation

High accuracy

- ±1% total system accuracy conforms to ANSI C12.1 metering standards, (10% to 100% of CT rating)

The Enercept H8035/8036s are three-phase networked (Modbus RTU) power meters used for energy services metering/submetering in commercial and industrial applications. These innovative meters combine power metering electronics and high accuracy industrial grade CTs in a single package, eliminating the need for external electrical enclosures and greatly reducing installation time and cost.

There are two application specific platforms to choose from. The Basic Enercept Energy Meters (H8035) are ideal for submetering applications where only kW and kWh are required. The Enercept Enhanced Data Stream meters (H8036) output 26 energy variables including kW, kWh, volts, amps and power factor, making them ideal for power monitoring and diagnostics.

Installing these meters is simple. Just connect the three, colored voltage leads to the power conductors to be monitored, and match the color coded CTs (e.g., red voltage lead and red CT must be on the same conductor). To further simplify the installation, these meters automatically detect and compensate for phase reversal, eliminating the concern of CT load orientation. Up to 63 power meters can be daisy-chained on a single RS-485 network.

ORDERING INFORMATION

Modbus Basic Energy Meters

MODEL	MAX. AMPS	CT SIZE
H8035-0100-2	100	SMALL
H8035-0300-2	300	SMALL
H8035-0400-3	400	MEDIUM
H8035-0800-3	800	MEDIUM
H8035-0800-4	800	LARGE
H8035-1600-4	1600	LARGE
H8035-2400-4	2400	LARGE



Modbus Enhanced Data Stream Meters*

MODEL	MAX. AMPS	CT SIZE
H8036-0100-2	100	SMALL
H8036-0300-2	300	SMALL
H8036-0400-3	400	MEDIUM
H8036-0800-3	800	MEDIUM
H8036-0800-4	800	LARGE
H8036-1600-4	1600	LARGE
H8036-2400-4	2400	LARGE

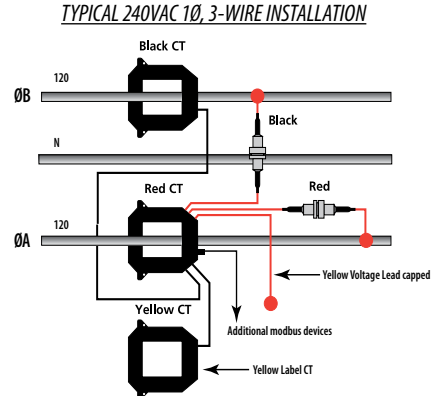
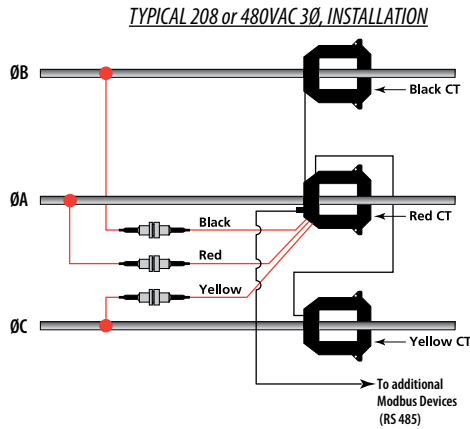
*H8036 models work with H8920-1 LON nodes
*H8035 models work with H8920-5 LON nodes



For N2 protocol versions, order H8025-xxxx-x, or H8026-xxxx-x. Other protocols available, consult factory.

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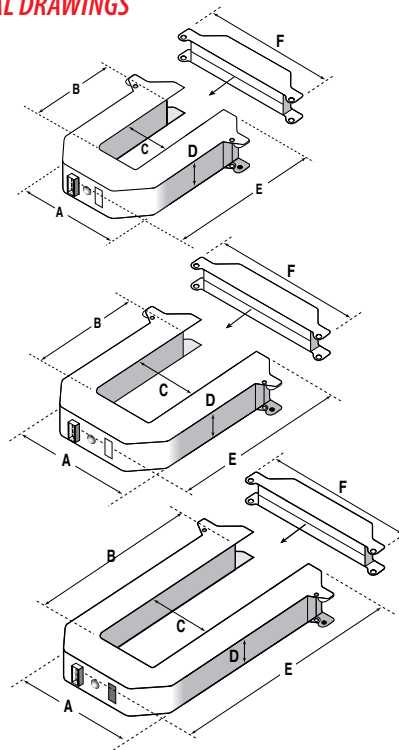
APPLICATIONS/WIRING EXAMPLE



H8035/6 SERIES SPECIFICATIONS

Input Primary Voltage	208 to 480VAC rms††
Number of Phases Monitored	One to Three
Frequency	50/60Hz
Primary Current	Up to 2400 amps cont. per phase††
Internal Isolation	2000VAC rms
Insulation Class	600VAC rms†††
Temperature Range	0 to 60°C, 50°C for 2400A
Humidity Range	0 - 95% non-condensing
Systems Accuracy	±1% of reading from 10% to 100% of the rated current of the CTs... accomplished by matching the CTs with a meter and calibrating them as a system
Output Physical Characteristics	RS-485, 2 wire plus shield
Baud Rate	9600, 8N1 format
Protocol	Modbus RTU**(*)
Current Transformer Split-Core	100, 300, 400, 800, 1600, 2400 amps

DIMENSIONAL DRAWINGS



SMALL 100 Amp 300 Amp	MEDIUM 400 Amp 800 Amp	LARGE 800 Amp 1600 Amp 2400 Amp
A = 3.75" (96 mm)	A = 4.90" (125 mm)	A = 4.90" (125 mm)
B = 1.51" (38 mm)	B = 2.89" (73 mm)	B = 5.50" (139 mm)
C = 1.25" (31 mm)	C = 2.45" (62 mm)	C = 2.45" (62 mm)
D = 1.13" (29 mm)	D = 1.13" (29 mm)	D = 1.13" (29 mm)
E = 3.91" (100 mm)	E = 5.20" (132 mm)	E = 7.88" (201 mm)
F = 4.75" (121 mm)	F = 5.91" (151 mm)	F = 5.92" (151 mm)

H8035 Data Output Specifications

Data Output	kWh, kW
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H8036 Data Output Specifications

Data output: kWh, Consumption	Power factor ØA†
kW, Real Power	Power factor ØB†
kVAR, Reactive power	Power factor ØC†
kVA, Apparent power	Voltage, ØA to ØB
Power factor	Voltage, ØB to ØC
Average Real power	Voltage, ØA to ØC
Minimum Real power	Voltage, ØA to Neutral†
Maximum Real power	Voltage, ØB to Neutral†
Voltage, line to line	Voltage, ØC to Neutral†
Voltage, line to neutral†	Amps, Current ØA
Amps, Average current	Amps, Current ØB
kW, Real power ØA†	Amps, Current ØC
kW, Real power ØB†	
kW, Real power ØC†	

**Detailed protocol specifications are available at: <http://www.veris.com/modbus/>

(*)Other protocols available. Please consult factory.

† Based on derived neutral voltage.

†† Contact factory to interface for voltages above 480VAC or current above 2400 Amps.

††† Do not apply 600V Class current transformers to circuits having a phase-to-phase voltage greater than 600V, unless adequate additional insulation is applied between the primary conductor and the current transformers. Veris assumes no responsibility for damage of equipment or personal injury caused by products operated on circuits above their published ratings.