

H8035/8036 SERIES

Enercept® Networked (Modbus RTU) Power Meters



Integral submetering solution eliminates the need for separate enclosures!



Patent pending

DESCRIPTION

The Enercept H8035/8036's 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 electronic enclosures and greatly reducing installation time and cost.

There are two application specific platforms to choose from. The Enercept Energy Meters (H8035) are ideal for submetering applications where only kW (demand) and kWh (consumption) are required. The Enercept Enhanced Data Stream meters (H8036) output 26 energy variables including kVAR, VA, 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.

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 (H8036)...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

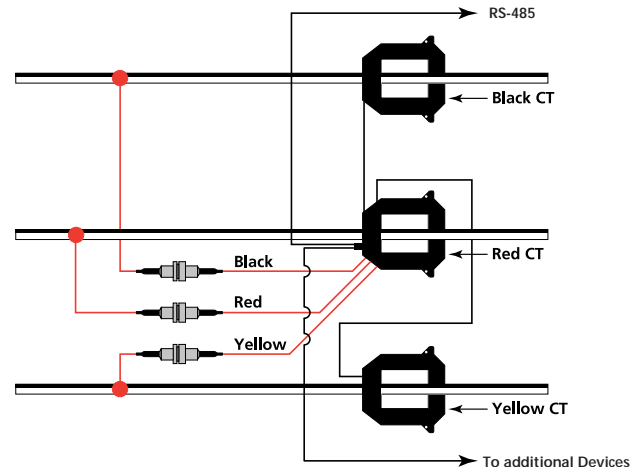
High accuracy

- ±1% system accuracy conforms to ANSI C12.1 metering standards

NETWORKED POWER METERS

APPLICATIONS/WIRING DIAGRAM

TYPICAL 208 or 480 VAC 3Ø, INSTALLATION



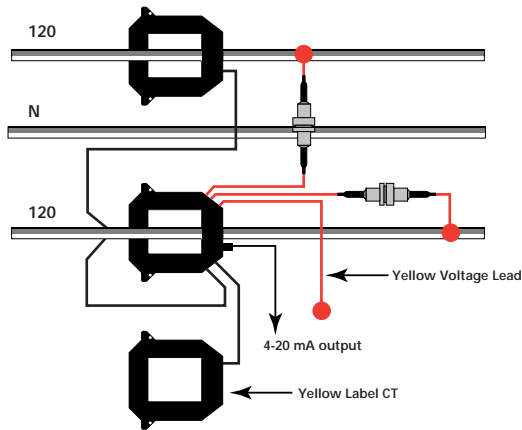
Ordering INFORMATION



MODBUS ENERGY METERS		
MODEL	RANGE	CT SIZE
H8035-0100-2	100 A	SMALL
H8035-0300-2	300 A	SMALL
H8035-0400-3	400 A	MEDIUM
H8035-0800-3	800 A	MEDIUM
H8035-0800-4	800 A	LARGE
H8035-1600-4	1600 A	LARGE
H8035-2400-4	2400 A	LARGE

MODBUS ENHANCED DATA STREAM METERS		
MODEL	RANGE	CT SIZE
H8036-0100-2	100 A	SMALL
H8036-0300-2	300 A	SMALL
H8036-0400-3	400 A	MEDIUM
H8036-0800-3	800 A	MEDIUM
H8036-0800-4	800 A	LARGE
H8036-1600-4	1600 A	LARGE
H8036-2400-4	2400 A	LARGE

TYPICAL 240 VAC 1Ø, 3-WIRE INSTALLATION



H8035/6 SERIES SPECIFICATIONS

Input primary voltage	208 to 480 VAC rms
Number of phases monitored	One or Three
Frequency	50/60 Hz
Primary current	Up to 2400 amps cont. per phase
Internal isolation	2000 VAC rms
Case insulation	600 VAC rms
Temperature range	0 to 60° C
Humidity range	0 - 95% non-condensing
Accuracy	±1.0% (ANSI C12.1)
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

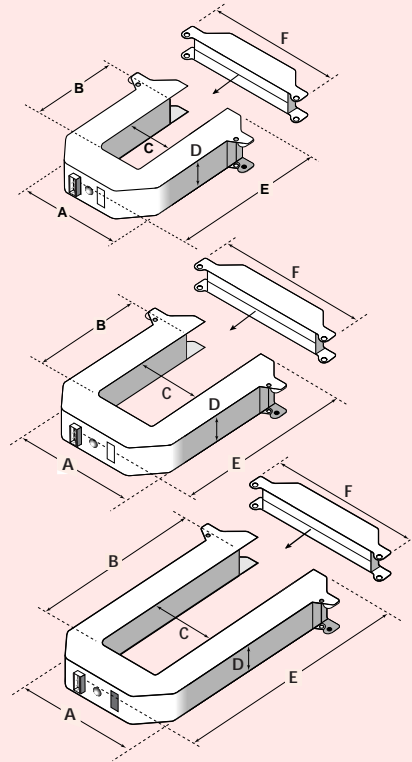
H8035 Data Output Specifications

Data for output kWh, Consumption
kW, Demand

H8036 Data Output Specifications

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

DIMENSIONAL DRAWINGS



SMALL 100 Amp 300 Amp	MEDIUM 400 Amp 800 Amp	LARGE 800 Amp 1600 Amp 2400 Amp
A = 3.75" (95 mm)	A = 4.90" (124 mm)	A = 4.90" (124 mm)
B = 1.51" (38 mm)	B = 2.89" (73 mm)	B = 5.50" (140 mm)
C = 1.25" (32 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" (99 mm)	E = 5.20" (132 mm)	E = 7.88" (200 mm)
F = 4.75" (121 mm)	F = 5.91" (150 mm)	F = 5.92" (150 mm)

NETWORKED POWER METERS

**Detailed protocol specifications are available at:

<http://www.veris.com/modbus/>

(*)Other protocols available. Please consult factory

† Based on derived neutral voltage