

**INTEGRAL SUBMETERING SOLUTION  
ELIMINATES THE NEED  
FOR SEPARATE ENCLOSURES**



U.S. Patent No. 6,373,238

H8035



Great for kW and kWh applications

H8036



Outputs 26 energy variables including kW, kWh, volts, amps, and power factor

# Enercept® Networked Power Meters (Modbus® RTU)

The Enercept H8035/8036 are innovative three-phase networked (Modbus RTU) power meters that combine power metering electronics and high accuracy industrial grade CTs in a single package. The need for external electrical enclosures is eliminated, 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.

Color-coordination between voltage leads and CTs makes phase matching easy. Additionally, 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 managing & 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...saves time and labor
- 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, (10% to 100% of CT rating)

## SPECIFICATIONS

<b>Input Primary Voltage</b>	208 to 480VAC RMS <sup>††</sup>
<b>Number of Phases Monitored</b>	One to Three
<b>Frequency</b>	50/60Hz
<b>Primary Current</b>	Up to 2400 amps cont. per phase <sup>††</sup>
<b>Internal Isolation</b>	2000VAC RMS
<b>Insulation Class</b>	600VAC RMS <sup>†††</sup>
<b>Temperature Range</b>	0° to 60°C (32° F to 140°F), 50°C (122°F) for 2400A
<b>Humidity Range</b>	0 - 95% non-condensing
<b>Systems Accuracy</b>	±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
<b>Output Physical Characteristics</b>	RS-485, 2 wire + shield
<b>Baud Rate</b>	9600, 8N1 format
<b>Protocol</b>	Modbus RTU <sup>**(*)</sup>

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

<sup>\*</sup> Other protocols available. Please consult factory.

<sup>††</sup> Contact factory to interface for voltages above 480VAC or current above 2400 Amps.

<sup>†††</sup> 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.

## H8035 Data Output Specifications

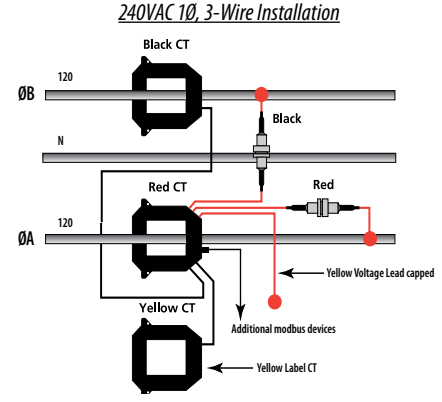
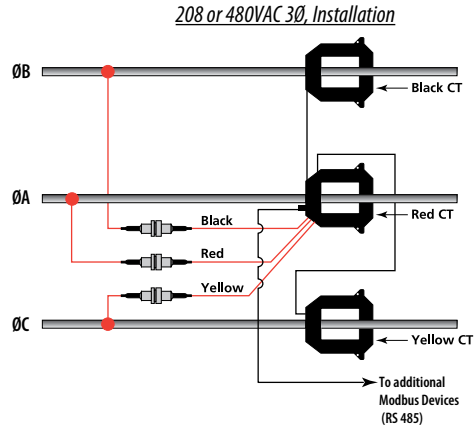
<b>Data Output</b>	kWh, kW
--------------------	---------

## H8036 Data Output Specifications

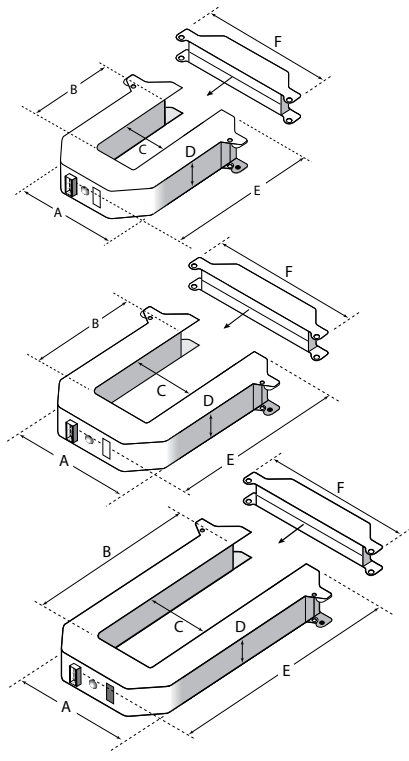
<b>Data output:</b>	kWh, Consumption kW, Real Power kVAR, Reactive power kVA, Apparent power Power factor Average Real power Minimum Real power Maximum Real power Voltage, line to line Voltage, line to neutral <sup>†</sup> Amps, Average current kW, Real power ØA <sup>†</sup> kW, Real power ØB <sup>†</sup> kW, Real power ØC <sup>†</sup>
---------------------	--

<sup>†</sup> Based on derived neutral voltage.

APPLICATION/WIRING EXAMPLES



DIMENSIONAL DRAWINGS



**SMALL**  
100 Amp  
300 Amp

A = 3.8" (96 mm)  
B = 1.5" (38 mm)  
C = 1.3" (31 mm)  
D = 1.1" (29 mm)  
E = 3.9" (100 mm)  
F = 4.8" (121 mm)

**MEDIUM**  
400 Amp  
800 Amp

A = 4.9" (125 mm)  
B = 2.9" (73 mm)  
C = 2.5" (62 mm)  
D = 1.1" (29 mm)  
E = 5.2" (132 mm)  
F = 5.9" (151 mm)

**LARGE**  
800 Amp  
1600 Amp  
2400 Amp

A = 4.9" (125 mm)  
B = 5.5" (139 mm)  
C = 2.5" (62 mm)  
D = 1.1" (29 mm)  
E = 7.9" (201 mm)  
F = 5.9" (151 mm)

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

\*H8035 models work with H8920-5 LON nodes



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

ACCESSORIES

CT Mounting brackets...see page 220.  
H8920 LON nodes...see page 102.