

Power Meter for Voltage-Mode CTs

H84xxV, H84xxVB, & H84xxVBS Series



**BACNET
CONNECTIVITY
VIA NEW
E8950 GATEWAY**

Revenue Grade Power Meter for Voltage Mode CTs.

FEATURES

- Revenue Grade measurements
- Intuitive navigation with context-sensitive menus for easy use
- Panel, wall, DIN rail mount...provide mounting flexibility
- Digital power meters automatically detect and correct phase reversal, eliminating the need to be concerned with CT load orientation...fast, trouble-free installation
- Real-time power monitoring via local display or through control/data acquisition systems
- Large, easy-to-read display
- Multiple values displayed at the same time on an anti-glare display featuring a green back-light

DESCRIPTION

The **H84xxV, H84xxVB, and H84xxVBS Series** digital power meters deliver high accuracy and high value at a competitive price.

Whether you are looking for a 1-phase pulse output meter to monitor kWh, or a 3-phase communicating meter to monitor THD, the H84xxV Series has the right meter for you, in panel and wall mounting styles for your convenience.

The pulse output unit offers two pulse outputs. While kWh is standard, the second pulse output provides a field-selectable choice between phase loss or kVARh.

The Modbus communications unit offers a choice between two data outputs, Full Data Set (FDS) or Extended Data Set (EDS). Data points are listed on the next page.

SPECIFICATIONS



Agency Approvals	UL508; Cat. III, Pollution Degree 2, for distribution systems up to 347VAC (L-N)/600VAC (L-L);
	CE per IEC61010-1, Cat. III, Pollution Degree 2, for distribution systems up to 300VAC (L-N)/480VAC (L-L)
INPUTS	
Control Power	100 to 415 ± 10% VAC, 5VA, 45-60 Hz
DC	125 to 250VDC ± 20% VDC, 3W ¹
Voltage Input	UL: 600VAC; CE: 300VAC (L-N)
Current Input	
CT Scaling	Primary: Adjustable from 5A to 32,767A
Measurement Input Range	1V RMS full scale (+20% over-range). CT's must be rated for use with Class 1 voltage inputs
ACCURACY	
Current and Voltage	0.5%
Power	ANSI C12.16, 1%
Measurement - True RMS	True RMS up to 15th harmonic, 3-phase AC System
OUTPUTS	
Pulse Output #1	(kWh) N.O. Static Output (240VAC or 300VDC, 100mA max. @ 25°C, derate 0.56mA per°C above 25°C) 2.41kV RMS isolation
Pulse Output #2 (H8463V/VB/VBS)	(Phase Loss or kVARh) N.C. Static Output (240VAC or 300VDC, 100mA max. @ 25°C, derate 0.56mA per°C above 25°C) 2.41kV RMS isolation
MECHANICAL	
Weight	H84xxV: 0.8 lbs; H84xxVB: 6.35 lbs; H84xxVBS: 9.15 lbs
Protection Class	V: IP40 front, IP30 back; VB: NEMA 1, IP40
ENVIRONMENTAL	
Altitude of Operation	3000 m
Operating Temp Range	Meter: 0° to 60°C (32° to 140°F); Display: -10° to 50°C (14° to 122°F)
Storage Temp Range	Meter and Display: -40°C to 85°C (-40° to 185°F)
Humidity Range	0-95% noncondensing

1. For control voltages >415VAC to 600VAC order H84xxVBS

APPLICATIONS

- Energy monitoring in building automation systems
- Renewable energy
- Energy management
- Commercial submetering
- Industrial monitoring
- Cost allocation

DATA OUTPUTS

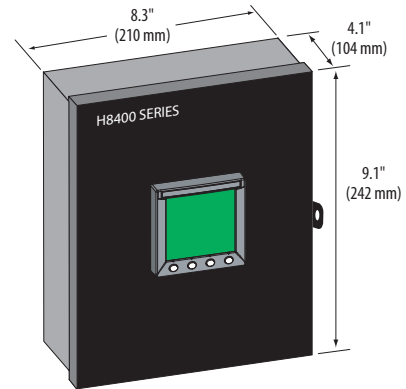
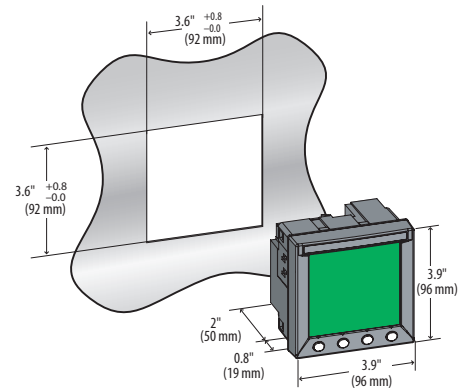
H8436: Full Data Set (FDS)

- kWh, Consumption
- kW, Real Power
- kVAR, Reactive power
- kVA, Apparent power
- Power factor
- Voltage, line to line
- Voltage, line to neutral
- Amps, Average current
- kW, Real power ØA
- kW, Real power ØB
- kW, Real power 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

H8437: Extended Data Set (EDS)

- (FDS Plus):**
- Amps, Current Neutral
 - Frequency
 - kVAh, Consumption
 - kVARh, Consumption
 - Minimum Real power
 - Maximum Real power
 - KVA, Apparent Power, Per Phase
 - KVAR, Reactive Power, Per Phase
 - KW, Total Real Power Present Demand
 - KVA, Total Apparent Power Present Demand
 - KVAR, Total Reactive Power Present Demand
 - KW, Total Real Power Max Demand
 - KVA, Total Apparent Power Max Demand
 - KVAR, Total Reactive Power Max Demand
 - THD, Voltage A-N, B-N, C-N
 - THD, Voltage A-B, B-C, A-C
 - THD, Current, Per Phase
 - Usage Hours
 - Usage Minutes
 - Total Hours
 - Total Minutes

DIMENSIONAL DRAWINGS



ORDERING INFORMATION



MODEL	DESCRIPTION	DATA OUTPUT		DISPLAY SCREENS	
	PANEL MOUNT - 120 480V (For Control Voltages > 415VAC to 600VAC order H84xxVBS)	Pulse	Modbus	FDS	EDS
H8463V*	Panel Mount, 1V, CT Input, FDS	●		●	
H8453V*	Panel Mount, 1V, CT Input, FDS	●		●	
H8436V	Panel Mount, 1V, CT Input, FDS		●	●	
H8437V	Panel Mount, 1V, CT Input, EDS		●		●

	WALL MOUNT - 120-480V (For Control Voltages > 415VAC to 600VAC order H84xxVBS)	Pulse	Modbus	FDS	EDS
H8463VB*	Wall Mount, 1V, CT Input, FDS	●		●	
H8453VB*	Wall Mount, 1V, CT Input, FDS	●		●	
H8436VB	Wall Mount, 1V, CT Input, FDS		●	●	
H8437VB	Wall Mount, 1V, CT Input, EDS		●		●

	WALL MOUNT - 240-600V	Pulse	Modbus	FDS	EDS
H8463VBS*	Wall Mount, 1V, CT Input, FDS, 240-600V	●		●	
H8453VBS*	Wall Mount, 1V, CT Input, FDS, 240-600V	●		●	
H8436VBS	Wall Mount, 1V, CT Input, FDS, 240-600V		●	●	
H8437VBS	Wall Mount, 1V, CT Input, FDS, 240-600V		●		●

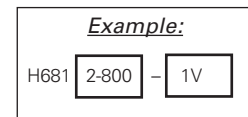
*The H8453 has two normally open solid-state outputs: one kWh and one field selectable for phase loss or kVARh. The H8463 has one normally open output (kWh) and one normally closed output (field selectable for phase loss or kVAR).

COMPANION CURRENT TRANSFORMERS

(Model/Amps) (Output Type)



- Medium:**
 1-400 = 400A
 1-600 = 600A
 1-800 = 800A
- Large:**
 2-800 = 800A
 2-1600 = 1600A
 2-2000 = 2000A
 2-2400 = 2400A



ACCESSORIES

- Fuse Kits (AH02, AH03, AH04)
- DIN Rail Mounting Kit (AH23)
- Modbus-to-BACnet Converter (E8950)
- Modbus TCP Gateway (U013-0012)



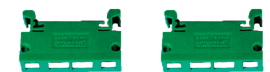
E8950



U013-0012



AH04



AH23