

Power Meter for Voltage-Mode CTs

Maximize System Efficiency and Gain Precise Power Quality with 1% Energy and Power Accuracy



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.

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

APPLICATIONS

- Energy management and performance contracting
- Submetering for commercial tenants
- Activity-based costing in commercial and industrial facilities

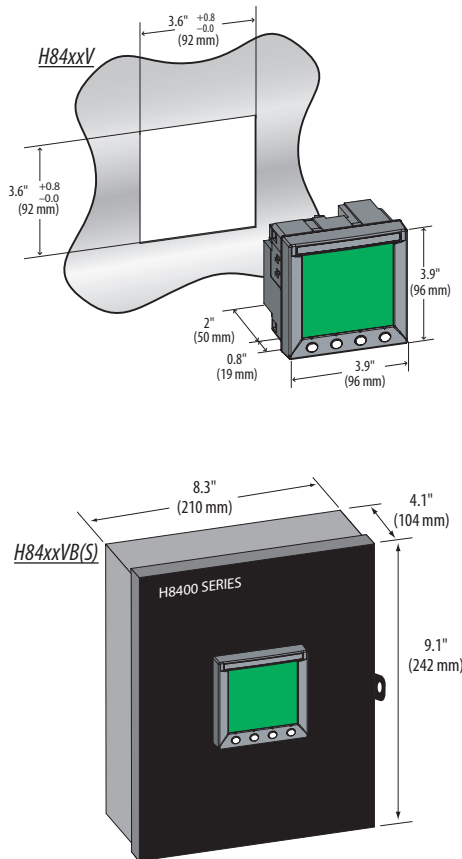
SPECIFICATIONS



Inputs:	
Control Power	100 to 415 $\pm$ 10%VAC, 5VA, 45-60 Hz
DC	125 to 250VDC $\pm$ 20%VDC, 3W *
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)
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:	
Operating Temperature Range	Meter: 0° to 60°C (32° to 140°F); Display: -10° to 50°C (14° to 122°F)
Storage Temperature Range	Meter and Display: -40°C to 85°C (-40° to 185°F)
Humidity Range	0-95% noncondensing
Agency Approvals	UL508; ANSI C22.2, Cat. III, Pollution Degree 2, for distribution systems up to 347VAC (L-N)/600VAC (L-L); CE per IEC61010, Cat. III, Pollution Degree 2, for distribution systems up to 300VAC (L-N)/480VAC (L-L)

*For control voltages >415VAC to 600VAC order H84xxVBS

DIMENSIONAL DRAWINGS



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

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).

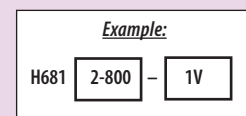
COMPANION CURRENT TRANSFORMERS

(Model/Amps) (Output Type)
H681 - 1V
= 0-1VAC

Small:
0-100 = 100A
0-200 = 200A
0-300 = 300A

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



AH23



AH23