

METERING

IQ Energy Sentinel



METERING — DOOR MOUNTED
IQ ENERGY SENTINEL



DESCRIPTION

The Energy Sentinel is a highly accurate, microprocessor-based, breaker mounted device designed to monitor power and energy readings. It represents an alternative to watt meters, watt-hour meters, and watt demand meters. Key advantages include space savings, lower installation costs, and remote monitoring capability.

The IQ Energy Sentinel mounts on the load side of a Series CF (150A), J (250A), or K (400A) frame circuit breaker.

Sub-metering application examples for the IQ Energy Sentinel include energy monitoring and billing for commercial, industrial, recreational and residential facilities. Commercial applications include tenant billing within convention halls, office buildings, shopping malls, hospitals, warehouses and storage facilities. Industrial applications include department billing, process/assembly line energy cost analysis and machine monitoring within plants. Recreational facilities include sports arenas, camping grounds, trailer parks and marinas. Multi-tenant buildings, such as apartment houses, can be sub-metered as well.

Applications in Cutler-Hammer products include:

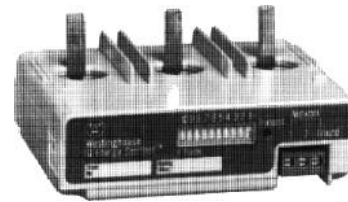
- Pow-R-Line 4 Panelboards – feeder circuits.
- Pow-R-Line 4 Switchboards - feeder circuits.
- Series 2100 Motor Control Centers and enclosed control with circuit breaker disconnects
- Enclosed circuit breakers
- Pow-R-Way II Bus Plugs with circuit breaker disconnects
- Universally mounted and 3-wire versions of the Energy Sentinel are also available (see the IQ Products section of this catalog, Tab KK)

FEATURES

- Monitors, 1% full scale accuracy:
 - Kilowatts
 - Kilowatt demand
 - Kilowatt hours
- No external CT's or PT's required
- Mounts directly to load side of Series C - F, J and K frame circuit breakers
- Powered directly from circuit breaker
- Built-in communications capability:
 - Address set by DIP switches
 - Communicates at 9600 baud
- Choice of operator interfaces:
 - IQ Central Energy Display
 - Custom billing software
 - IMPACC Series III software

BENEFITS

- One device replaces multiple meters
- Space and cost savings
- Remote monitoring
- Flexibility -- displays what is needed, where it is needed



Cat. No. IQESF208

SPECIFICATIONS

- Voltage inputs:
 - Single phase, 3-wire 120/240V ac
 - Three phase, 4-wire 120/208V ac, 277/480V ac
- Current inputs:
 - Minimum 0.0 x frame rating
 - Maximum 1.5 x frame rating
- Frequency..60 Hz
- Power consumption. 1 VA
- Operating temperature. -25° to 70°C (-13° to 158°F)
- Storage temperature -40° to 85°C (-40° to 185°F)
- Humidity. 0 to 95% R.H. non-condensing
- Communications 9600 baud

UL

UL File No. EI 45217 for Cutler-Hammer Series C breakers

IQ ENERGY SENTINEL

Breaker	Amperes Maximum	Voltage	Catalog Number	Price
F Frame ①	150A	120/208, 120/240V ac 277/480V ac	IQESF208 IQESF480	\$750.
J Frame ①	250A	120/208, 120/240V ac 277/480V ac	IQESJ208 IQESJ480	830.
K Frame ①	400A	120/208, 120/240V ac 277/480V ac	IQESK208 IQESK480I	910.

① UL listed for Cutler-Hammer Series C breakers.

APPROXIMATE DIMENSIONS AND SHIPPING WEIGHTS

Description	Dimensions in Inches			
	Wide	High	Deep	Hole Dia.
F Frame Sentinel	3.17	4.12	1.25	0.59
J Frame Sentinel	4.06	4.12	1.25	0.90
K Frame Sentinel	4.06	5.31	1.25	0.96