

S-10 Technical Specifications



Metering Specifications

Metered Voltage:	120, 220, 240, 1Ø2W, 2Ø3W or 3Ø4W
	Wye, 50/60 Hz
Current Input:	0.1Amp input (50A, 100A or 200A Primary)
Four quadrant Consumption & Demand:	Delivered and received: kW, kVARLeading, kVARLagging, & kVA
	Volts-squared hours & amp-squared hours
Programmable Interval Data & Peak Demand:	5 min to hourly window
	Meter total and/or by phase
Real time per phase:	Voltage, current, phase angle, power factor, THD, watts, VARs, VA and frequency
Time of Use:	Up to 16 blocks per day available for all metering parameters
Meets ANSI C12.1 and C12.16	
UL, UL-C File E204142	
IEC Optical Communication Interface (Standard Feature)	

Additional Features

Pulse Datalogger:	Up to 4 Form A dry contact pulse inputs for water, BTU, gas, other
Specifications:	Max. Distance: 300 feet from external pulse meter to S-10 (18 gauge min.)
	Min. Pulse Width: Power on: 50 msec, Power off: 500 msec
	When the S-10 loses power, the pulse accumulator still has the capability to record pulses but the sample rate is reduced.
	Max. Pulse Rate: Power on: 10 pulses/sec max, Power off: 1 pulse/sec max
	Peak voltage: 5.5V, Peak current: not applicable
	Isolation: 2.5kV isolation between pulse output and AC line
	Max. signal debounce tolerance: 20 msec
Data Integration Options:	IQ Software
	MV-90 TIM module
	ASCII-based, open-data protocol
	Open-source data conversion program

Communications

Power Line Communications (standard feature)
Modbus RTU protocol (2-wire RS-485)

Accuracy

+ 0.5% @ unity and 50% power factor; 1-100% of full-scale (excluding external CT error)

Liquid Crystal Display

32 digit liquid crystal display (16 digit x 2 rows)
6 whole digit consumption register
Data digit height: 0.31"
Programmable display scroll & decimal place display

Operating Range

Voltage: Rated Voltage (90% to 110%)
Temperature: -20°C to +60°C
Humidity: 0 to 95% R.H. (non-condensing)
Transient/Surge Suppression: ANSI C37.90.1-1989

Memory

512 kbyte non-volatile flash memory retains daily and interval data
During power outage:
- Flash memory retains daily and interval data
- Long-life lithium battery maintains time, logs incoming pulses and retains data acquired within the incompleting interval at the time of the outage

Shipping Weight & Dimensions

	1 meter box	8 meter box
Flush Mount:	4.5 lbs	35 lbs
Surface Mount:	3.5 lbs	29 lbs
Flush Mount Dimensions:	3.625"H x 8"W x 3"D	Face Plate: 6.5"H x 11"W
Surface Mount Dimensions:	3.75" H x 8.25"W x 3"D	