

## Electro Industries Power Meter

- Multifunction TRMS Measurements
- Meets ANSI C12.20 and IEC 687 0.2% Accuracy Class
- Bright 0.56" 3 Line LED Display
- % of Load Bar for Analog Perception
- Programmable CT & PT Ratios
- Modbus and DNP Protocol
- RS-485, Ethernet or IR communication



Shark



Parameter	Accuracy	Display
Voltage L-L & L-N:	0.1%	0-9999 V or kV, scalable
Current:	0.1%	0-9999 Amps or kAmps
± Watts	0.2%	0-9999 Watts, kWatts, MWatts
±Wh	0.2%	5 to 8 Digits Programmable
±VARs	0.2%	0-9999 VARs, kVARs, MVARs
±VARh	0.2%	5 to 8 Digits Programmable
VA	0.2%	0-9999 VA, kVA, MVA
VAh	0.2%	5 to 8 Digits Programmable
PF	0.2%	±0.5 to 1.0
Frequency	0.01 Hz	45 to 65 Hz
%THD	1.0%	0 to 100%
% Load Bar	1-120%	10 Digit Resolution Scalable

Real time measurements for all parameters; plus Min/Max for V, A, W, VAR, VA, PF, f, %THD: Average for A, W, VAR, VA, PF

### SPECIFICATIONS

System:	3 Element Y, 2.5 Element Y, 2 Element Δ, 4 Wire Δ
Voltage Input:	0-416VAC L-N, 0-721VAC L-L
Max. Burden:	0.36VA per phase at 600V, 0.014VA at 120V
Current Withstand:	100A for 10sec, 300A for 3sec, 500A for 1sec
Max. Burden:	0.005VA per phase at 11A
Pass-thru Wire:	0.177" (4.5mm) max dia.
Isolation:	All Inputs & outputs galvanically isolated to 2500VAC
Operating Temp:	-30 to +70°C, <95% RH non-condensing
Sampling:	400+ Samples/Cycle, all channels measured simultaneously
Update Rate:	1sec, except 100msec on Watts, VAR, VA
RS485 Communications:	1200-57600 baud: Modbus RTU, ASCII, DNP 3.0
Ethernet Communications:	10/100BaseT: Modbus TCP/IP, DNP 3.0
IR Communications:	IrDA thru faceplate
Dimensions, Ratings:	4.85"H x 4.82"W x 4.25"D, NEMA12 face

### ORDERING INFORMATION

To Order—Insert Number Code for Each Letter to Select Catalog Number.  
Order Example: EI/Shark100-60-10-V2-D2-485P-X

EI/SHARK **A** - **B** - **C** - **D** - **E** - **F** - **F**

<b>A</b>	Model*	
	100	Power Meter/Transducer with LED Display
	200	Advanced Power Meter/Transducer with LED Display
<b>B</b>	Frequency	
	50	50Hz
	60	60Hz
<b>C</b>	Current Input Class	
	10	0-11A (5A nominal)
	2	0-2A (1A nominal)
<b>D</b>	Functions	Model 100      Model 200
	V1	Volts/Amps      V, A, Freq, Power, Energy
	V2	V1 + Power & Frequency      V1 + 2M Datalogging
	V3	V2 + Energy Counters      V2 + Harmonic Analysis
	V4	V3 + Harmonics & Limits      V3 + Limit & Control
<b>E</b>	Power Supply	
	D2	90-264VAC/100-370VDC, 10VA
	D	18-60VDC
<b>F</b>	Communications	
	X	None
	485P	RS-485 & Pulse (standard on Model 200 & Transducers)
	INP10	Ethernet & Pulse
<b>G</b>	Mounting	
	X	ANSI
	DIN	DIN mounting brackets

\* Add suffix T for Transducer only (DIN mount) without display

## Crompton Metering System

**NEW**



- DIN Rail Mounting
- 3 Parameter Backlit LCD
- Programmable CT Ratio
- TRMS Measurement
- User Programmable System Configuration
- Pulsed Output & Modbus Standard

Ri3



Button	Screen	Parameter Displayed	Button	Screen	Parameter Displayed
V/Hz	1	Volts L1-N	A	1	Current 1
		Volts L2-N			Current 2
		Volts L3-N			Current 3
	2	Volts L1-L2	2		Neutral Current
		Volts L2-L3	3		L1 Current Max Demand
		Volts L3-L1			L2 Current Max Demand
	3	Frequency			L3 Current Max Demand
		Volts L1-N THD%	4		Neutral Current Max Demand
		Volts L2-N THD%			Current L1 THD%
		Volts L3-N THD%	5		Current L2 THD%
		Volts L1-L2 THD%			Current L3 THD%
		Volts L2-L3 THD%			kW
		Volts L3-L1 THD%	P/PF	1	kVA
E	1	Import kWh			kVAr
	2	Export kWh			kVA
	3	Import kVAh	2		kW Max Demand
	4	Export kVAh	3		Power Factor

### SPECIFICATIONS

Nominal input voltage:	100-289V AC L-N (173-500V AC L-L)
Max. input:	120% of nominal overload voltage continuous, 2 x range maximum for 1 second repeated 5 times at 5 minute intervals
Nominal burden:	<0.2VA per phase
Nominal input current:	5A AC rms
Max. input:	120% of nominal overload current continuous, 10 x nominal for 1 second repeated 5 times at 5 minute intervals
Nominal burden:	<0.6VA per phase
Frequency:	45-66Hz
System CT:	primary values 1 to 9999
Auxiliary	
Operating range:	110-400V AC ±10% (99-440V AC absolute limits) or 120-350V DC ±20% (96-420V DC absolute limits)
Burden:	<10VA/5W

### Accuracy

Voltage, Current:	0.5%
Neutral Current:	4% (calculated)
Frequency:	0.1Hz
Power factor (PF)	1% of unity
Active power (W)	±1% of range
Reactive power (Var):	±1% of range
Apparent power (VA):	±1% of range
Active energy (kWh):	Class1 (IEC 62053-21)
Reactive energy (kVAh):	±1% of range
THD:	1% up to 31st harmonic
Response time:	1 sec
Pulsed output:	1 solid state relay
Contact rating:	50mA max at 250V AC
RS-485 Modbus output:	1 channel, 2-wire half duplex
Baud rate:	2400, 4800, 9600, 19200, 38400
Enclosure:	UL94V0 polycarbonate, DIN-rail mounting
Dimensions:	72 x 90mm (width x height) as per DIN 43880
Protection rating:	IP52 front, IP30 case
Terminals:	Shrouded screw-clamp 0.05-4mm wire
Operating environment:	-10 to +55°C, <90% RH non-condensing

### ORDERING INFORMATION

Ri3-01      Integra Ri3 DIN Mount Digital Metering System