

DC

DC ENERGY METER SHUNT | HALL EFFECT SENSOR

Multi-channel DC Energy | Voltage/Current full scale

SMART DEVICE FOR ALL RENEWABLE ENERGY RESOURCES!



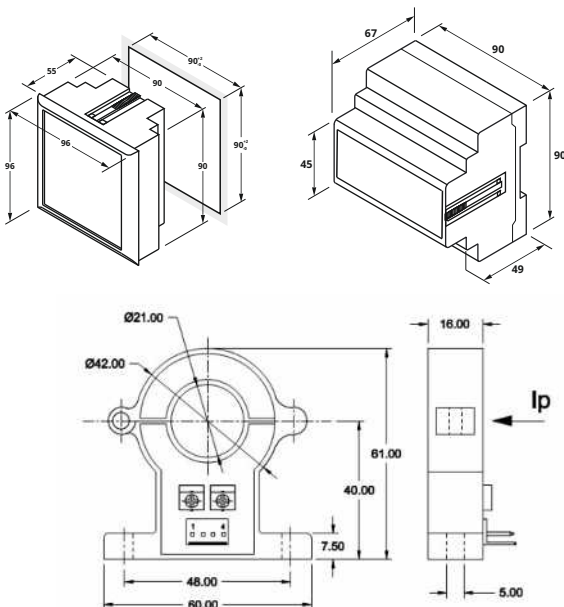
Features:

- Multiple channels can be measured by a single meter, EDC4100D and EDC4100H
- 4 Current Input channels
- 1 Voltage input channels
- Differential current input for all the current channels
- Bi directional current measurement to study charging and discharging circuits
- Current full scale programmable independently
- Programmable Shunt secondary (50mV to 100mV) – for Shunt based.
- Programmable CT Primary for all channels up to 200A - for Hall Effect CT
- Data logging - Offers logs of parameters such as Energy, Load hours and Ampere hours both Import and Export (12am Snap shot for 45 days) – Optional
- Optional RS485 communication
- Optional programmable relay output with tripping time upto 180sec.
- Auxiliary supply: EDC 4100 - 40 to 300VAC/DC; EDC 4100D/H - 15 to 60VDC;
- Energy resetting at 99999999k x PTpri x CT pri
- Auto scaling and Auto scrolling
- Cleared parameters through key press
- User configurable and editable password
- Compact size and weight
- Easy installation and simple wiring

Mechanical Specification:

Panel mount

DIN Rail



Application:

- Renewable energy systems such as solar photovoltaic (PV) arrays, wind turbines, & electric vehicle (EV)
- Telecommunication & Data centres
- DC Energy Management Systems
- Transportation
- Industrial Applications

Applicable Standards :

DIN 40050 EN 60529	Degrees of protection provided by enclosure for electrical equipment against ingress of solid foreign objects
IS 12784	Electrical measuring transducers for converting AC electrical quantities into DC electrical quantities

Technical Specification:

Specification	EDC 4100	EDC 4100D	EDC 4100H
Current Sensing through	DC Shunt		Hall Effect CT
Rating	Shunt mV rating 50mV to 100mV. (Programmable with individually programmable Primary current of range 0.001 to 999.9KA)		Hall Effect CT rating Up to 200A. CT Primary programmable for all channels independently. Primary current of range 0.001 to 999.9KA)
Mounting	Panel mount	DIN Rail	DIN Rail Mount
Accuracy:	Class 1.0 FS (0.5 FS optional)		
No. of channels	1 voltage channel and 4 current channels		
Voltage Input Range	10V to 800VDC (48V factory default). Varieties of range in voltage like 100VDC, 150VDC, 300VDC, 600VDC, 800VDC, etc (factory settable only) Primary Programmable range: 0.100 to 999.9KV		
Aux supply	40 to 300VAC/DC	15 to 60VDC	
Display	1 row 6 digits, LED	1 row 7 digits, LCD	
Communication Baud rate Isolation	RS 485 serial channel connection Industry standard Modbus RTU protocol. 4800 bps to 38400 bps (preferred 9600 bps) 2000 volts AC isolation for 1 minute between communication and other circuits		
Humidity	5% to 95% non condensing		
Ingress Protection	IP 51		
Operating Temperature	-10° C to +55° C (14° F - 131° F).		
Storage Temperature	-25° C to +70° C (-13° F - 158° F).		
Dimension	96x96x67mm	90x90x67mm	
Screw	M3	M2 for Current connector and M3 for Voltage connector	
Torque(Max)	1 N-m	2.04 kgf-cm / 0.2 N-m	
Wire Gauge	11 AWG	28-16 AWG	
Weight (Approx)	Shunt: When packed: 300g When shipped : 350g		HEC: When packed: 575g When shipped : 675g