

DC ENERGY METERS

Complete and accurate readings of DC electrical parameters

**ACCURATELY
MEASURE ALL
DC-BASED
ELECTRICAL
PARAMETERS.**

**IMPROVE
ENERGY
EFFICIENCY OF
DC ELECTRICAL
SYSTEMS.**

**ENSURING PROPER
OPERATION AND
SAFETY OF
DC ELECTRICAL
SYSTEMS.**

- Multiple channels can be measured by a single meter upto **1000V voltage input**
- **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
- **Display parameters**
- Volts, Amps, watts, Load hours and Energy
- Current full scale programmable independently
- Programmable Shunt secondary (50mV to 100mV) – for Shunt based.
- **Datalog:** Programable time interval 1min to 12 hrs. Programmable upto 29, can be selected as 1, 2, 4, 9, 14, 29, and logged can be download from the Application
- Optional RS485 communication
- Auxiliary supply: 15 to 60V DC
- 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

**UPTO
1000V DC**
Measurements

BI-DIRECTIONAL
Power monitoring

BEMS
Network connectivity

Parameters	Panel/Din-Rail Mount single Channel	Panel/Din-Rail MountFour Channel	Din-Rail MountFour Channel with Hall Effect
ACCURACY	EDC 2150 / 2150D	EDC 2450 / 2450D	EDC 2450H
Class 1.0	✓	✓	✓
Class 0.5	✓** (Only for 2150D)	✓** (Only for 2450D)	
BASIC PARAMETERS			
DC Voltage	✓	✓	✓
Current - Channel-1	✓	✓	✓
Current - Channel-2		✓	✓
Current - Channel-3		✓	✓
Current - Channel-4		✓	✓
POWER PARAMETERS			
Watts - Channel -1	✓	✓	✓
Watts - Channel -2		✓	✓
Watts - Channel -3		✓	✓
Watts - Channel -4		✓	✓
IMPORT(Charged) ENERGY PARAMETERS			
Wh- Channel-1	✓	✓	✓
Wh- Channel-2		✓	✓
Wh- Channel-3		✓	✓
Wh- Channel-4		✓	✓
Ah -Channel-1	✓	✓	✓
Ah -Channel-2		✓	✓
Ah -Channel-3		✓	✓
Ah -Channel-4		✓	✓
Old Ah- Channel 1 to 4	✓	✓	✓
Load hours	✓	✓	✓
Old Load hours	✓*	✓*	✓*
Old Wh - (Channel 1 to 4)	✓*	✓*	✓*
Old Ah - (Channel 1 to 4)	✓*	✓*	✓*
EXPORT(Discharged) ENERGY PARAMETERS			
Wh- Channel-1	✓	✓	✓
Wh- Channel-2		✓	✓
Wh- Channel-3		✓	✓
Wh- Channel-4		✓	✓
Ah -Channel-1	✓	✓	✓
Ah -Channel-2		✓	✓
Ah -Channel-3		✓	✓
Ah -Channel-4		✓	✓
Load hours	✓	✓	✓
Old Load hours	✓*	✓*	✓*
Old Wh - (Channel 1 to 4)	✓*	✓*	✓*
Old Ah - (Channel 1 to 4)	✓*	✓*	✓*
COMMUNICATION			
Modbus RTU - RS485	[✓]	✓	✓

✓ Default

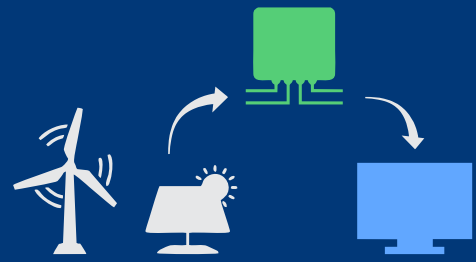
[✓] Optional

* through communication

✓**MOQ

SMART DEVICE FOR ALL RENEWABLE ENERGY RESOURCES!

Multi-channel DC energy, Voltage/Current full scale



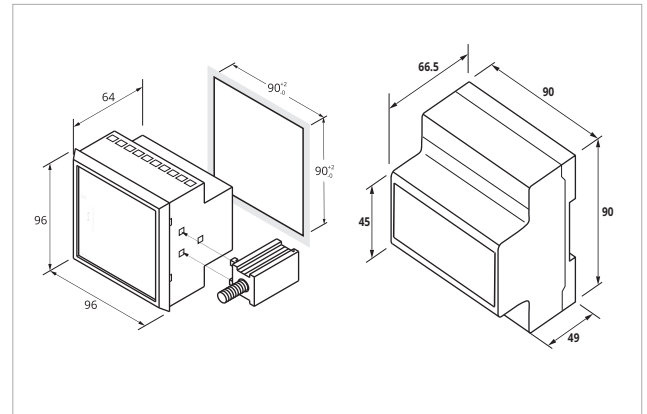
Application

- 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.

Mechanical Specification



Technical Specification

Specification	EDC 2150 / 2150D Single Channel		EDC 2450 / 2450D Four Channel	
GENERAL CHARACTERISTICS				
Current Sensing Through:	DC Shunt			
Rating:	Shunt mV rating 50 mV to 100 mV (Programmable with individually programmable primary current of range 0.001 to 999.9kA.			
Mounting:	Panel Mount /DIN-Rail Mount			
Accuracy:	Class 1.0 FS (0.5 FS optional - MOQ on request).			
Number of Channels:	1 channel voltage & 1 channel current		1 channel voltage & 4 channel current	
Voltage Input Range:	10V to 1000V DC (48V default). Varieties of range in voltage like 100V DC, 300V DC, 800V DC, 1000V DC, etc (factory settable only)			
Auxiliary Supply:	15 to 60V DC			
Display:	1 row 7 digit LCD.			
COMMUNICATION				
Rs485 Interface:	Serial channel connection industry standard MODBUS RTU protocol. Baud rate: 4800 bps to 19200 bps (preferred 9600 bps). Isolation: 2000 volts AC isolation for 1 minute between communication and other circuits.			
ENVIRONMENTAL CHARACTERISTICS				
Humidity:	5% to 95% non condensing			
Ingress Protection:	IP 51			
Operating Temperature:	-10°C to +55°C (14°F to 131°F).			
Storage Temperature:	-25°C to +70°C (-13°F to 158°F)			
MECHANICAL CHARACTERISTICS				
Dimension	Panel Mount: 96 x 96 x 57mm, DIN-Rail Mount: 90 x 90 x 67mm			
Screw:	M3			
Torque (Max):	1 N-m			
Wire Gauge:	28-16 AWG			
Weight (Approx.):	Unpacked: 300g, Packed: 350g			