

FEATURES

- Single DC Voltage Channel (DEM9004F)
- Two Isolated DC Voltage Channels (DEM9024F)
- Four DC Current Channels
- Current measurement through Shunt or Hall Sensors
- Power Supply for Hall Sensors Provided in the meter
- Micro controller based with precision ADC
- Programmable CT primary current individually for 4 channels
- Displays DC Voltage, Current, kW, kWh and Run hour
- Separate energy and run hour register provided for all the four channel
- Digital Calibration by software
- Energy & Run hour storage in EEPROM back up
- kWh range 999999.99 kWh
- Run hour range 9999.59 hours
- Password protected
- Quick & easy to install
- Sealed Dust proof enclosure suitable for Panel mounting

DEM 9004F

DC Energy Meter

ADDITIONAL FEATURES DEM9024F

- Two isolated DC Voltage Channel
- Four DC Current Channels
- DEM9024F used to monitor two independent BTS Systems with different DC Voltages in a single meter
- Grouping of voltage and current for measurement
- Isolation between voltage channels

OPTIONAL FEATURES

- Optically isolated RS485 communication port with MODBUS RTU protocol
- Split core Hall effect CT's suitable for mounting on load cable without disturbing the load

APPLICATIONS

- Telecom Tower Monitoring systems
- Railway Power systems that uses DC supply
- Solar Power System.
- DC Panel Meter
- UPS
- Any DC Plants that Needs Monitoring with PC Support

www.icdipl.net



TECHNICAL SPECIFICATION (DEM 9004F, DEM 9024F)

MEASURED QUANTITIES

Parameter Shown : 1) DC Voltage
2) DC Current
3) kW
4) kWh
5) Runhour

MEASUREMENT

Voltage Range : 20 – 100V DC (One/Two Voltage channels)
Current Range : Up to 100 A (Programmable)

Current Input : 50 mV / 75 mV from shunt OR
0 – 4 V from Split core Hall effect CT's

Auxiliary voltage : Derived from voltage input

Accuracy : DC voltage : +/-0.5 % on reading + 2 LSD
DC Current : +/-0.5 % on reading + 2 LSD
kW : +/-0.5 % on reading + 2 LSD
kWh : +/-0.5 %
Run Hour : +/- 3 sec / day

Display resolution : DC voltage : 0.01 V
DC Current : 0.1 A
kW : 0.001 kW
kWh : 0.01 kWh
Run Hour : 1 minute

Operating Temperature : 55° C (Max.)

DISPLAY

Type : 2 Row 16 Character LCD with Backlit
Character Size : 4.35 x 2.95 mm (H x W)
LCD Power save Mode : Provided. When no key is pressed for 3 minutes, the LCD Backlit is switched OFF to save power and enhance the life of LCD. The LCD is switched ON when any key is Pressed

KEY FUNCTIONS

Key Pad : 4 Keys for setting program mode parameters and to select scroll / hold Display Mode
Program Mode Setting : Pass word, Current setting, Device ID, LCD power save mode & Energy reset
Entry Protection : Provided through Password
Energy & Run hour : Stored in EEPROM

COMMUNICATION

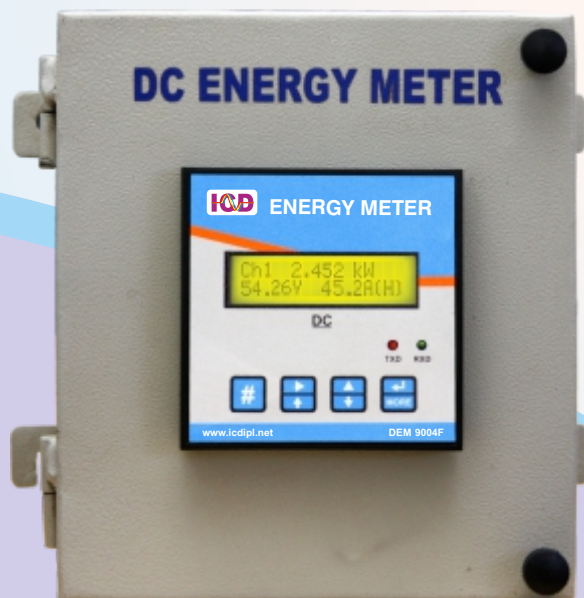
Communication (Optional) : Optically isolated RS485 Communication Port supporting MODBUS-RTU Protocol

CASE AND DIMENSIONS

Enclosure : Poly Carbonate
Dimension : 96(H) x 96(W) x 45(D) mm
Mounting : Panel

Note: Specifications are subject to change without prior notice due to continuous improvement in product development.

DC ENERGY METER ACCESSORIES



DC Energy Meter with Shunt Box



Shunt



Hall effect CT

OUR RANGE OF PRODUCTS

Volt Meter, Ammeter, VAF Meter, Energy Meter, Dual Source Meter, Load Manager, Multi Function Meter, Trivector Meter, Maximum Demand Controller, Harmonic Indicator, Power Factor Controller, Smart PF Controller, Power Factor Correction Panel, AC Voltage Controller, AC Current Controller, Motor Protection System, Voltage/Current/Power/Frequency Transducer, Power Transmitter, Energy Management and Billing Systems etc...



INDUSTRIAL CONTROLS & DRIVES (INDIA) PVT. LTD.

33, Mettukuppam Road (Via Alappakkam Road), Maduravoyal, Chennai 600095, Tamil Nadu, India
Mobile: +91 87544 22555 / 87544 22502 Phone: +91 44 4293 4324 / 25 / 33 / 2378 1753
Fax: +91 44 4293 4355 E-mail: gcicdipl@vsnl.com / sales@icdipl.net Web: www.icdipl.net