

# MULTI FUNCTION METERS



*Reliable Performance*



## DT-108+

- ▶ Measurement of all voltages and currents, power.
- ▶ Multi function parameter measurement.
- ▶ Large Multi line LED bright red display .
- ▶ Accuracy class 1s(IEC 1036/CBIP 88) .
- ▶ Optional RS 485 port modbus RTU protocol.



### NIPPEN ELECTRICAL INSTRUMENTS CO

Unit 1 :12-A Joy Engg Compound,Marol Maroshi Road,Andheri (E),Mumbai - 400059,India

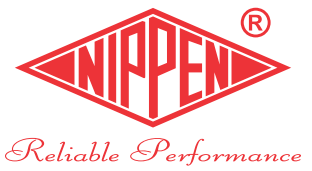
Unit 2:106,Tejpal Industries Premises,Andheri Kurla Road,Sakinaka,Mumbai - 400072,India

Tel : 022-29201581/29253164/29201806

Email : sales@nippenco.com

[www.nippenco.com](http://www.nippenco.com)

# MULTIFUNCTION METERS - DT-108+



Our range of three-phase multi-function digital panel meters for accurate and reliable measurement of electrical parameters (voltage, current, power, frequency, etc) in industrial and commercial applications. It has a large multi-line Red LED display which enables three parameters to be displayed at the same time.

## Features

- Accuracy class 1s.
- True RMS measurements with perfect linear response.
- 3rows of (14.2mm)7 segment led 4digit bright red display .
- 8 digit for energy.
- On site programmable CT ratio, PT ratio.
- V,A,PF all 3 phases can be viewed simultaneously.
- Wide range of auxiliary supplies.
- Reliable performance at Low Current(>5% of load).
- Password Protection for setup mode.
- Single relay output for multiple alarms.
- Finger proof self lifting terminals for connection of wiring.
- Auto scaling of kilo, mega led.
- Keypad:** 4 keys for scrolling display pages & programming functions.

## Electrical Specification

- System : 3phase 4wire / 3phase 3wire / 1phase 2 wire.
- Operating Voltage: 80 - 500 V AC Line to Line at 45.....65 Hz.
- PT Ratio : 110v to 500kv / 110v.
- Current: 50mA-6A AC.
- CT Ratio: 5-9999A AC (only primary to be set).
- Power Consumption:<0.1VA in Current Circuit,< 0.1 VA in Voltage.
- Auxiliary supply: 230VAC default ( $\pm 20\%$ ) 50Hz..
- Burden : 0.2VA per phase & < 3VA max on Auxiliary supply.
- Dielectric strength : 2 kv for 1min.
- Relay rating : 5Amps 250Vac.

## Relevant Standard

- EMC: IEC 61326 / Immunity: IEC 61000-4-3 / Safety: IEC 61010-1-2001
- Protection : Ip52 Front / Ip20 Terminal block.

## Programmable Setting

- CT Ratio Primary to be set,
- PT Ratio, Meter ID, MD, Password.
- Auto/Manual Scroll ON & OFF Mode .

## Parameters Displayed

- VLN, VLL, Ampere, Frequency & Average , RPM.
- Active Power kW , Apparent Power kVA, Reactive Power(kVAR) Total.
- Active energy, Apparent energy, Power Factor (PF) , Average.
- On hours, Minimum & Maximum of VLN,VLL,Amps,HZ. .

## Optional Features

- RS-485 serial output port with standard Modbus Rtu protocol.
- Single relay output to set over, under limit.

## Environment

- Ambient: -10° C to 55° C.
- Storage: -20° C to 70° C.
- Humidity: <95% RH ..... Non condensing.

## Mechanical Dimensions

- Front : 96mm x 96mm / Depth 54mm
- Panel Cut Out : 91mm x 91mm  $\pm 0.1$ mm
- Casing : Flame retardant ABS.
- Connector : ABS & Pcb terminal block.

## Applications

- Commercial and Industrial Sub Metering.
- Switch gear panels.
- Control and relay panels.
- Power Control panels and Motor Control panels.
- Scada, Building Management system(BMS).

Features	DT-36	DT-3600	DT-108	DT-108+	DT-108DG
LN voltage & average.	●	●	●	●	●
LL voltage & average.	●	●	●	●	●
Line Current & average.	●	●	●	●	●
Frequency with RPM.	●	●	●	●	●
Active Power.		●	●	●	●
Re-Active Power.		●	●	●	●
Apparent Power.		●	●	●	●
Power factor.		●	●	●	●
Active Energy.			●	●	●
Apparent Energy.			●	●	●
Power On hours.	●	●	●	●	●
Number of interruption.	●	●	●	●	●
Min Max values.				●	
Current Demand.				●	
Optional RS-485.	●	●	●	●	●
Optional Relay output	●	●	●	●	●
Generator Energy					●

## Typical Diagram

