

MULTIFUNCTION METERS



96sq

MULTIFUNCTION METERS

MFM-801

FEATURES

- True RMS measurements and perfect linear response
- LCD 4 Rows of 7 segment 4 digit , bright LCD display with Backlight
- 1 row of Digit for Energy
- On site, programmable CT/PT Ratio/ Password /Meter ID/Demand
- Bar Graph represent for Load Current
- Display of LOAD Hours ,ON Hours, RPM
- On site selection of Auto Scroll/Manual Scroll/Fixed Screen
- Wide range of Auxiliary supplies
- Harmonic measurement (total and individual)
- Minimum & Maximum values for voltage/ current/Line to line/frequency
- One relay output can be multiplexed for multiple alarms
- Finger proof self-lifting terminals for connection (optional)

TECHNICAL SPECIFICATIONS

- System : 3 Phase/ 4 Wire or 3 Phase/3 Wire or 1 Phase/ 2 Wire
- Input voltage range : 0V-500V AC LL.
- Input Current range : 5A or 1A
- Auxiliary Supply : 230V /110V AC(±10%) or 80V – 270V AC/DC /12V-48V DC
- Frequency : 45-65Hz
- Burden : 0.2VA per Phase
: <3VA max on Auxiliary supply
- Maximum Overload voltage : 1.2 times rated continuous
- Maximum Overload current : 2 times rated continuous
- Dielectric strength : 2 KV for 1 min.
- Relay rating : 5A/250V AC

MECHANICAL DIMENSIONS

Front	96 x 96mm (Depth 54 mm)
Panel Cut out	91 x 91mm (± 0.1mm)
Casing	Flame retardant ABS
Connectors	Terminal block ABS
Protection	IP 52 front IP 20 Terminal block

OPTIONAL FEATURES

- RS 485 serial output port with standard MODBUS RTU protocol
- Relay output

MEASUREMENT

- Voltage: L-L Phase, L-N Line & Average
- Current: 3 Phase & Average
- Frequency: System Frequency
- Power Factor: All 3 Phases and Average
- kVA: All 3 Phases and Total
- kW: All 3 Phases and Total
- kVAr: All 3 Phases and Total
- kWh & kVAh, kVArh
- RPM & ON Hours, Load Hours
- Harmonics of Volts, Amps(THD%)
- Number of interruptions
- Maximum Current demand (Time settable 2-60 min)
- Minimum & Maximum values for Voltage & Current, Line to line, Frequency

ENVIRONMENT

- Ambient temperature : -10° C to 55° C
- Storage temperature : -10° C to 70° C
- Relative Humidity : <95%, Non-condensing

APPLICATIONS

- Generator sets
- Power distribution / Control panels
- Testing for Quality conformance
- Switchboards / Process control.
- SCADA & Building Management Systems (BMS), EMS

RELEVANT STANDARD

EMC	IEC 61326
Immunity	IEC 61000-4-3
Safety	IEC 61010-1-2001

FEATURES	PARAMETERS
Line to Neutral (VLN)	VLN Average, V(L1-N,L2-N,L3-N)
Line to Line (VLL)	VLL Average, V(L1-L2,L2-L3,L1-L3)
Line Current (ILN)	I Average, I(L1,L2,L3) with Bar graph
Frequency, RPM (Generator application)	HZ, RPM
Active Power	kW Total, kW(L1,L2,L3)
Apparent Power	kVA Total, kVA(L1,L2,L3)
Reactive Power	kVAr Total, kVAr (L1,L2,L3)
Power Factor	PF Average PF (L1,L2,L3)
Active Energy	kWh
Apparent Energy	kVAh
Re-Active Energy	kVArh
Harmonics(THD%)	Volts & Amps upto 31st
ON hours, Load Hours	ON hr, Ld hr
Minimum & Maximum Values	VLN, VLL, I & Hz
Current Demand (2-60 min.)	Amps
Optional 1 Field Relay Programmable	A, VLN, VLL, Hz, kW, PF, kVA
Optional RS 485 serial port	RTU-Modbus /Baud Rate 9600
Number of times aux.supply ON	Number of interruptions