



ETI Power

TOD Meter  
Multifunction Meter  
Power & Energy Meter

# Smart Load Manager

EIPL56ER

0.5S Class Accuracy\*



“आत्मनिर्भर भारत अभियान”

## Description

Smart Load Manager are based on 32 Bit, 100 Pin Microprocessor, with 24 Bit Six Channel Sigma Delta Front end Analog to Digital Converters. The measurement accuracy of Class 0.5 can be achieved on the practical range of operation.

Programmable Load Manager is a versatile instrument used for controlling the electricity consumption and is extremely useful for putting up a limit on the drawn load. This instrument can also be used in various applications with controlled load options.

● The variants available are

- **TMFLR70** - Smart MF LCD Meter Cl - 0.5S
- **EIPL720CR** - Smart Power Analyzer Cl - 0.2S
- **TMFR42** - Advance MF 7 Segment Meter Cl - 1.0
- **TMF28** - Basic MF 7 Segment Meter Cl - 1.0

## Key Features

- **0.5S Class Accuracy of Active Energy**
- 32 Bit, 100 Pin, Processor
- SMT Technology
- 7 Segment Bright LED Display
- 1 Energy Pulse Output
- RS 485 interface (Modbus-RTU)
- Various choice of Bright LED display
- Bi-directional Energy
- Four-Quadrant reactive energy
- Total Harmonic Distortion (THD)
- Real Time Measurement of Demand
- Real Time Measurement of V/I/P/PF/F
- Password Protected
- Unbalance Power Measurement
- Power on hours optional
- Load on/off hours optional
- Data Record
- Front case protection degree IP54
- Insulation between Signal and Power Supply



ISO 9001, ISO 14001 CERTIFIED COMPANY

## Technical Specification

### DISPLAY

- LED

### VOLTAGE INPUT

- Range -  $3 \times 230/400V$
- Resolution -  $0.1 V$
- Impedance -  $\geq 1.7 m\Omega$  per phase
- Burden -  $\leq 0.1VA$  (per phase)
- Frequency -  $45 - 65Hz$
- Over load - Continuous:  $1.2Vn$   
Instantaneous:  $2Vn/1min$

### CURRENT INPUT

- Range -  $3 \times 5A/1A$
- Resolution -  $0.1 mA$
- Impedance -  $\leq 20 m\Omega$  per phase
- Burden -  $\leq 0.2VA$  per phase
- Over load - Continuous:  $1.2In$   
Instantaneous:  $10In/5sec$

### AUXILIARY SUPPLY

- Working range - AC/DC ( $80 \sim 270$ ) V
- Consumption -  $\leq 5VA$
- Withstand voltage -  $\geq 2kV$

### COMMUNICATION INTERFACE

- Physical interface - RS-485
- Communication speed - Up to 96bps
- Communication protocol - Modbus-RTU
- Isolation voltage - 2000 VAC (1 min)

### ENERGY PULSE OUTPUT

- Pulse width -  $80ms \pm 20\%$
- Max. terminal voltage - 35V
- Max. terminal current - 10mA
- Pulse frequency -  $\leq 10Hz$
- Output object - Import active energy  
Import reactive energy

### WORKING ENVIRONMENT

- Working temperature -  $-40^{\circ}C \sim -70^{\circ}C$
- Storage temperature -  $-40^{\circ}C \sim -85^{\circ}C$
- Relative humidity -  $\leq 95\% RH$ , no condensation
- Working altitude -  $\leq 2500m$
- Anti-pollution level - Non-corrosive gas

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- Protection degree - Front case Ip54  
rear case IP 20.
- Insulation - Between signal,  
Power supply  
Output terminal to case  
resistance  $> 100m\Omega$
- Withstand voltage - Input and power supply  
 $\geq 2kV$ , input and output  
 $\geq 2kV$ , power supply and  
output  $\geq 2kV$

## Communications

- RS-485 port communicates as per MODBUS Protocol & can be easily configured to an Enertrak GSM/GPRS modem for seamless & live data transmission to a host website application.

## Connections



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