

# SMART LOAD MANAGERS

*SL-6300*



- Measures all important Electrical Parameters
- Accuracy 1.0 % or 0.5 % (optional)
- THD of Voltage & current phase- wise & Total
- Dual Source measurement (EB & DG)
- Alarm Trip output programmable
- "RS 485" Port for communication to BMS/EMS/SCADA/PLC
- Optional Data logging
- Optional "ETHERNET" Port



# SMART LOAD MANAGERS

## FEATURES

- True RMS measurements & 4 quadrant operation.
- Simultaneous sampling of Volt & Amps.
- Error Indication of Phase sequence.
- Error Indication of CT polarity reverse.
- Auto scaling into kilo, Mega, Giga & decimal point.
- THD for Voltage & Current phase wise & Total.
- High & Low recording of events like A, VLN, VLL, Hz.
- % Unbalance of V & A of all phases.
- Old Energy Register & Load hours.
- Monitors export & import of energy.
- RS 485 communication Port

## OPTIONAL FEATURES

- Demand (kVA or kW) Rising / forecast with TOU.
- User programmable demand type.
- Demand interval (1min to 60 min, Std.-30min).
- Dual Source measurement (EB& DG).
- Data logging Facility.
- Upgradable to higher version.
- Register Map user programmable.
- ETHERNET Port.

## PROGRAMMABLE PARAMETER

- CTR, PTR, Meter ID(RS485), Password, RTC, Demand type, Demand Interval, & TOU, Alarm setting, Auto scrolling.

## ALARM OUTPUT FEATURES

- Single Relay output to trip alarm.
- Over & Under Voltage.
- Over & Under Current.
- Over THD%.
- Over & Under kW, kVA, PF.
- Relay rating : 5A/250VAC.

## SYSTEM

- Aux. Supply : 80-265VACDC.
- Input Voltage : 80 - 500VAC.
- Current Rating: 5A or 1A AC on request.
- Starting Current: 0.2% of rated current.

## ACCURACY

- Class 1.0% as per IS 13779.
- Optional class 0.5%.

## DISPLAY FEATURES

- 4 digits phase-wise, Average & Total.
- kWh - 8 digits.
- Viewing Area 44x68mm.

## ENVIRONMENT

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

## 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

FEATURES	PARAMETRS	SL 6300 (Basic)	SL 6300 DS (Dual Source)	SL 6300 MDC (With Demand)
Line to Neutral VLN	VLN Average, Vr-N, Vy-N, Vb-N	■	■	■
Line to Line VLL	VLL Average, Vr-y, Vy-b, Vb-r	■	■	■
Line Current I	Iaverage, Ir, Iy, Ib	■	■	■
Frequency	HZ	■	■	■
<b>POWER</b>				
Active Power	W Total, Wr, Wy, Wb	■	■	■
Apparent Power	VA Total, VA r, VA y, VA b	■	■	■
Re active Power	VAR Total, VAR r, VAR y, VAR b	■	■	■
Power Factor	PF Avg, PF r, PF y, PF b	■	■	■
<b>ENERGY/INTEGRATED</b>				
Active Energy Total kWh	Wh Tot, Import & Export	■	■	■
Apparent Energy Total kVAh	VAh Tot	■	■	■
Re active Energy Total kVARh	VARh Tot VARh -Ind, VARh-Cap	■	■	■
Load Hours, On Hours	Load Hours, On Hours	■	■	■
<b>HARMONICS</b>				
THD% Voltage & THD% Current	Phase-wise & Total	■	■	■
<b>EVENTS - HIGH/LOW</b>				
Voltage, Current, Frequency	VLN, VLL, A, Hz	■	■	■
<b>DEMAND</b>				
Active Power(kW), Apparent Power(kVA)	kW or kVA (4 relay output)	Only Display		■
<b>ALARM- 1Relay output field programmable</b>	VLN, VLL, A, Hz, kW, PF, kVA, THD	■	■	■
<b>Dual source Measurement DG</b>			■	
RS 485 Communication port as a standard or Ethernet Port		■	■	■

**HIGH LOW EVENTS RECORDING:** Enables user to identify & record single phasing, over/under voltage & current, highly lagging load etc & get to understand root cause and take necessary action, thereby enabling improving the electrical system by not over loading cables, motor and switchgear.

**HARMONICS:** The level of harmonics helps user to identify the distortion in electrical system & take necessary action using appropriate harmonic filters thus saving energy & also enhancing equipment & plant life.

**DEMAND:** Monitoring enables understanding the demand profile of billing cycle having demand peak with date & time stamp. This helps user to plan production equipment such as furnace & motors etc. Also it helps control by setting the peak demand values which if surpassed lead to alarm/cut off or supplementing deficit power requirement using Diesel Generator thus helping restrict crossing the sanctioned demand.

**DATA LOGGING:** This helps to determine the performance, quality, efficiency, cost reduction, fuel consumption and monitors many other critical factors.

**ETHERNET PORT:** This module is very useful for connecting a legacy serial device to an Ethernet network. It supports virtual mode of operation. In the virtual mode, one can configure the board as a PC COM port, thus enabling running of legacy application software.