What is Demand?

There are two terms that appear on the majority of utility bills:

Active energy consumption (kWh)

Maximum Demand

What is Maximum Demand?

Maximum Demand is calculated and billed by a KVA/KW demand meter, which records the highest KVA/kW value consumed in one 15 minute period or 30 minute period depending upon state to state, over a monthly billing cycle.

How to control Maximum Demand?

The purpose of controlling the demand is not to exceed the contracted maximum demand limit. One way to do this is to shed non-critical loads. Possible non-critical loads to be monitored and managed by our Maximum Demand Control Solutions are: -

• Lights • Compressors • Air conditioners • Pumps • Fans and extractors • Packaging machinery • Shredders• Ice machines • Refrigerators • Others...

The Demand Control Systems pay for themselves with the Energy Savings over a time period of about 1-2 years. This period can be even shorter by taking advantage of local utility energy efficiency rebate programs.

Save money on your energy bill:

Below Graph show the Demand with & without Demand Controller.



We have the solution for Demand controller, attached catalogue of SDC 51





Enersol Smart Demand Controller





Enersol Smart Demand Controller dimensions

The Enersol Smart Demand Controllers are easy-to-operate, compact in size, cost effective meters that offer the basic measurement capabilities required to monitor an electrical installation. Characterized by their rugged construction, compact size, and low installation costs, these state-of-the-art Smart Demand Controllers are ideal for use in Industrial & Commercial installations, not for domestic use

The Enersol Smart Demand Controller offers comprehensive power and energy monitoring at the feeders and individual loads.

The Enersol Smart Demand Controllers are available in two different versions to better fit specific applications:

- SDC51 Series
- SDCT51 Series

Applications

Maximum demand control Power monitoring operations. Load studies and circuit optimisation. Equipment monitoring and control. Preventative maintenance.

• Energy savings

- $_{\Sigma}$ Measure efficiency, reveal opportunities and verify savings.
- \sim Sub-bill tenants for energy costs.
- $_{\Sigma\!\!\!>}$ Allocate energy costs to departments or processes.
- $_{\Sigma}$ $\,$ Reduce peak demand surcharges.
- \rightarrow Reduce power factor penalties.
- Σ Leverage existing infrastructure capacity and avoid over-building.

• Energy availability and reliability

- \sim Verify the reliable operation of equipment.
- \sum_{D} Improve response to power quality-related problems.

Main characteristics

Accurate metering

The meter conforms to accuracy class 1.0 / 0.5.

Easy to read display

The bright, alphanumeric, 15mm high LED display provides 3 lines for measurement values with 4 digits per line. The display auto-scales for Kilo, Mega and Giga values. Auto scrolling mode allows for easy reading.

Quick and easy installation

Setup is done through the front panel keys. Direct connection for metering voltage inputs up to 480 Vac L-L.

Colour - coded terminal board labeling

The colour - coded label on the terminal board helps ensure accurate wiring.

Secure settings

Safeguard access to setup parameters with unique password protection. A keypad lock lets you display a user selected page by default.



Selection guide		SDC51
General		
Use on LV and HV systems		
Accuracy of the meter		
Number of samples per cycle		50 at 50 Hz
Instantaneous rms values		
Current,	Total, Per phase & Neutral	
Voltage,	Average, Phase to Neutral & Phase to Phase	
Frequency,		
Active power (W)	Total & per phase	
Reactive power (VAr)	Total & per phase	
Apparent power (VA)	Total & per phase	
Power factor,	Average & per phase	
Unbalance,	Current, voltage	
Phase angle,	Between V & I, Ph1, Ph2, Ph3	
RTC		
Load Survey Facility		
Other measurements		
Run hours	Operating time for load in hours	
ON hours	Operating time for meter in hours	
INTR	Number of interrupts	
Energy values		
Active (Wh)		
Reactive (VARh)		_
Apparent energy (VAh)		
Demand		
TOD Based Demand		
Relay		
Relay - 1		
Relay - 2		
Power quality measurements		
Total harmonic distortion %	Current, voltage, per phase	-
Display		
LED display		-
Communication		
RS-485 port		
Modbus protocol		
Optical Communication		
Caliberation		
LED Pulse Output		

By Default

Optional Features

Not Available

Ordering Selection

	SDC51
Class1.0 without TOD	SDC5110
Class1.0 with TOD	SDCT5110
Class0.5 without TOD	SDC5105
Class0.5 with TOD	SDCT5105

*TOD is stands for Time of Domain or Time of Use (TOU)