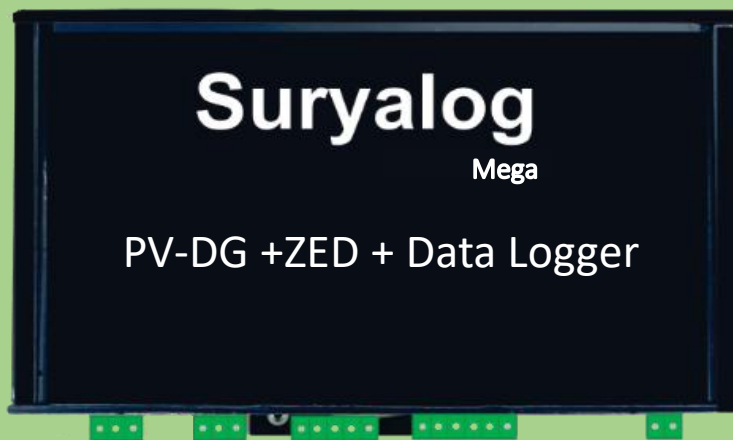


SuryaLogix®

Shift from monitoring
...to management



SuryaLog

SuryaLog is one of the leading product family for solar monitoring, feed-in management, PV-DG controller and IoT based solutions for solar power plants. **SuryaLog** devices and solutions make a remarkable contribution to the successful integration of solar energy into an intelligent power and help to make a successful transition to clean energy. Our intelligent controlling systems maximize the consumption of self-produced power.

India

Suryalogix Cluster , Floor No.1
S.No.54,Dhadge Industrial Estate,
Sinhgad Road,Nanded Phata,Pune-411024
Office: +91-952 781 8443.

sales@suryalogix.com

Dubai (Eminence Renewable)

Business Village (BV) Block-B,
Deira Clock Tower, Dubai, UAE
Office: +971-429 511 51.

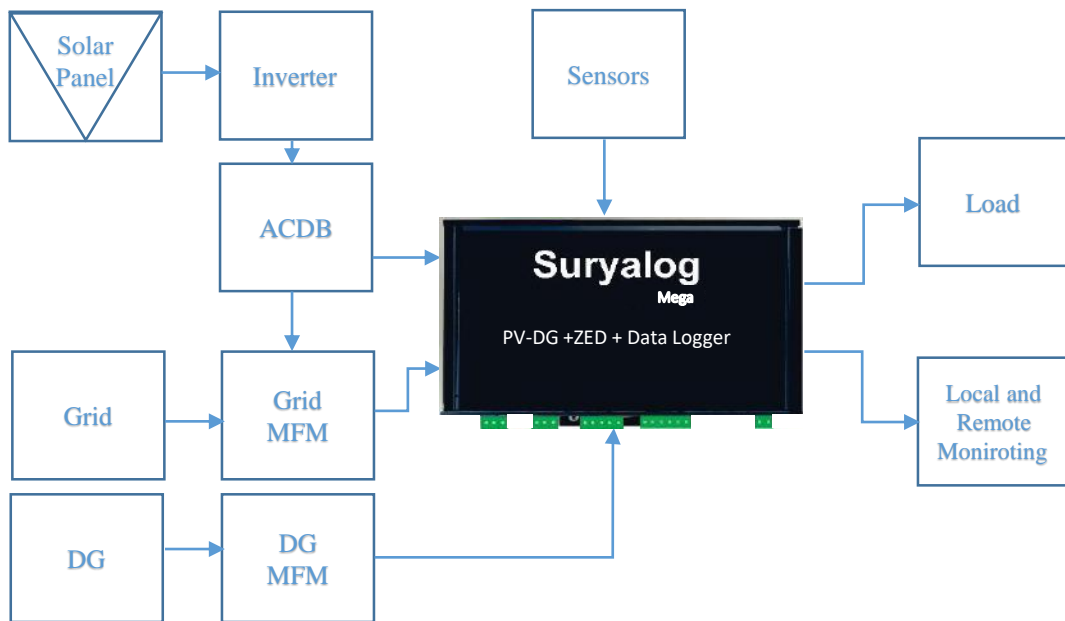
www.suryalogix.com

Germany

Wriezener Karree 10,
10243, Berlin
Office: +49-762 223 5216.

info@suryalogix.com

1. Block Diagram



2. Operating Principle

SuryaLog is a monitoring and controlling solution for solar power plants. It operates on the principle of collecting data through communication ports like RS485 and Ethernet by using the transfer media as wired or wireless. The collected data is processed to generate the required parameters and in the required formats. Also, it stores all the essential logs for future reference and sends to the cloud-based portal for remote access and monitoring

It has three operating modes:

1)Monitoring- Remote and Local: -

1. Remote monitoring with alerts
2. Local monitoring

2)Feed in Management (zero export): -

1. To avoid back feeding into grid
2. To monitor solar, Grid & load parameters

3)Operation with DG: Main functions when using with DG: -

1. Maintain spinning reserve at about 25-30% (when load is less than solar power)
2. To protect DG from excess solar power
3. To monitor solar, DG and load parameters

SuryaLog limits solar generation according to the customer load requirements. It calculates requirement through interfaced solar, load and grid energy meters and convert this requirement into set points & control signals. The controller sends the control signal to curtail the power generation from solar inverters, which reduces the overall plant generation to prevent back feeding. **SuryaLog** controls the power generation from 1% to 100% as per the load requirement.

India

Suryalogix Cluster , Floor No.1
S.No.54,Dhadge Industrial Estate,
Sinhgad Road,Nanded Phata,Pune-411024
Office: +91-952 781 8443.
sales@suryalogix.com

Dubai (Eminence Renewable)

Business Village (BV) Block-B,
Deira Clock Tower, Dubai, UAE
Office: +971-429 511 51.
www.suryalogix.com

Germany

Wriezener Karree 10,
10243, Berlin
Office: +49-762 223 5216.
info@suryalogix.com



3. Unique Features

- ✓ PV-DG controller, Zero export controller and Data logger inbuilt
- ✓ Monitoring & controlling (DG, grid, solar)-No Extra Data-Logger required at site
- ✓ Multiple DG interfacing & master-slave communication possible
- ✓ Wireless data transmission possible for multiple building/evacuations.
- ✓ Grid and DG side monitoring and comparison with solar & load
- ✓ Local data storage and upload to portal in case of internet failure
- ✓ Real time monitoring & Alert system through mails and messages
- ✓ Auto update & Remote update features available
- ✓ Remote setting configuration from any location
- ✓ Local data download & local report generation possible
- ✓ Communication Technology- Wireless, LAN, PLCC & RS-485
- ✓ Digital Input and Output Configurable
- ✓ Deemed generation, curtailment details, loss calculation due to curtailment available

4. Specification

Sr. No.	Specification	SuryaLog Mega 1
1	Digital I/O	Yes(4DI/O)
2	Reset switch, LED, Power Supply, RTC, GSM, Local Monitor, Remote Monitor	Yes
3	RS-485 Ports	2 Nos.
4	RS485 Extension	Upto 4 No's
4	Ethernet	1 Nos.
5	Wireless	Optional
6	Number of Inverters	Up to 24
7	Number of energy meters	Up to 8
8	Number of DG	Maximum 4
9	Number of Grid Incomer	Maximum 2
10	Dimensions(L*W*H)	157mm*90mm*45mm
11	Weight	620 grams
12	Internal Storage On chip	Up to 8 GB
13	Monitoring & Controlling	Both
14	Analog Input	Yes

India

Suryalogix Cluster , Floor No.1
 S.No.54,Dhadge Industrial Estate,
 Sinhgad Road,Nanded Phata,Pune-411024
 Office: +91-952 781 8443.
sales@suryalogix.com

Dubai (Eminence Renewable)

Business Village (BV) Block-B,
 Deira Clock Tower, Dubai, UAE
 Office: +971-429 511 51.
www.suryalogix.com

Germany

Wriezener Karree 10,
 10243, Berlin
 Office: +49-762 223 5216.
info@suryalogix.com

5. Port Specification and Application

Sr. No.	Ports & Interfaces	Specifications	Applications
1	RS-485-1	Baud rate: -4800,9600,19200 Parity ODD EVEN NONE ID 1-255	Multifunction meters
2	RS-485-2	Baud rate: -4800,9600,19200 Parity ODD EVEN NONE ID 1-255	Inverters
3	Digital I/O	Sink 10mA / Source 1Amps	Relay interface
4	Ethernet	100Mbps	For LAN and Internet
5	GSM/GPRS	4G SIM (Default)	Remote Cloud interface
6	Wifi	Optional	Remote Cloud interface
7	Dongle	Optional	Remote Cloud interface
8	Wireless (optional)	Range: -1200 Meters Technology:-wireless	To get Data from wireless Communication.
9	LED	3mm dual color	HB, GSM, Status
10	Analog Input	4 No's	Weather station and Analog Signal

6. Weather Sensor Interface

Sr. No	Item	Specifications	
1	Range	Current: 4-20mA (Default)	Voltage: 0-10V/0-2V (Optional)
2	Resolution (with Differential measurement)	Current: 0.01uA	Voltage: 10uV
3	Accuracy	>98%	
4	No. of pins for voltage and current channel	Current: 4-pins (default)	
		Voltage: 4-pins (Optional)	
5	Interface availability for	Pyrometer, Ambient Temperature, Module Temperature, Wind Sensor, Rain Gauge, Humidity.	

India

Suryalogix Cluster , Floor No.1
S.No.54,Dhadge Industrial Estate,
Sinhgad Road,Nanded Phata,Pune-411024
Office: +91-952 781 8443.
sales@suryalogix.com

Dubai (Eminence Renewable)

Business Village (BV) Block-B,
Deira Clock Tower, Dubai, UAE
Office: +971-429 511 51.
www.suryalogix.com

Germany

Wriezener Karree 10,
10243, Berlin
Office: +49-762 223 5216.
info@suryalogix.com



7. Other Technical Details

Sr. No.	Technical Points		Description
1	Data uploading frequency (Selectable)		5min (default), 1/5/10/15/30 min.
2	GSM& GPRS		Available
3	Master-slave communication method		Wired, wireless, PLCC, OFC
4	Power Supply (SMPS)	Input	110-260 VAC, 50/60 Hz
		Output	External plug- 10 to 28 VDC/2A
5	Ambient Temperature		-20°C to +60°C
6	Operating Temperature		-20°C to +70°C
7	Storage Temperature		-20°C to +70°C
8	Relative air humidity		5%-100%, non-condensing
9	Protection mode (Ingress protection), installation type		IP-32, Indoor-Din rail /wall mount
10	Local storage		Max 3-4 month
11	Warranty		1 year (Extended upto 5 year with extra charges)
12	Device compatibility with Inverters		Multiple makes having Modbus protocol

India

Suryalogix Cluster , Floor No.1
S.No.54,Dhadge Industrial Estate,
Sinhgad Road,Nanded Phata,Pune-411024
Office: +91-952 781 8443.
sales@suryalogix.com

Dubai (Eminence Renewable)

Business Village (BV) Block-B,
Deira Clock Tower, Dubai, UAE
Office: +971-429 511 51.
www.suryalogix.com

Germany

Wriezener Karree 10,
10243, Berlin
Office: +49-762 223 5216.
info@suryalogix.com



8. Certifications

Sr. No.	Test's	Test Standard
1	ESD	IEC 61326-1
2	EFT/B	IEC 61326-1
3	EFT/B (on signal/control/port)	IEC 61326-1
4	Surge	IEC 61326-1
5	EMI/EMC	IEC 61326-1, IEC 61000-6-4, IEC 61000-4-3
6	Environmental testing	IEC 60068-2-2
7	Cold test	IEC 60068-2-1
8	Change of temperature	IEC 60068-2-14
9	Damp heat cyclic	IEC 60068-2-30
10	Shock testing	IEC 60068-2-6
11	Vibration testing	IEC 60068-2-27

India

Suryalogix Cluster , Floor No.1
S.No.54,Dhadge Industrial Estate,
Sinhgad Road,Nanded Phata,Pune-411024
Office: +91-952 781 8443.
sales@suryalogix.com

Dubai (Eminence Renewable)

Business Village (BV) Block-B,
Deira Clock Tower, Dubai, UAE
Office: +971-429 511 51.
www.suryalogix.com

Germany

Wriezener Karree 10,
10243, Berlin
Office: +49-762 223 5216.
info@suryalogix.com