



**Sileaf**

Innovation In Pursuit Of Excellence

# Emerge Inverter

OFF-GRID

## FEATURES

- 5 to 10 KW Off-Grid
- Superior MPPT algorithm, harvesting more energy
- Multi-level inbuilt protections to handle the surge currents, short circuit, overloads etc.
- Hybrid design (Grid & solar charging)
- Graphical LCD display with user level settings
- Configurable energy management and power priorities system

## KEY ADVANTAGES

- Efficiency 91%
- Robust Design
- Up and running even at hundreds of remote locations
- Proven track record of least maintenance
- 9 Service Centres

## MODELS

- EMERGE1PH
- EMERGE3PH

## VARIANTS

### Single Phase PCU

MODEL NAMES	RATING
EMERGE1PH5000	5KW(96V)
EMERGE1PH6000	6KW(96V)
EMERGE1PH7500	7.5KW(96V and 120V)
EMERGE1PH8000	8KW(120V)
EMERGE1PH10000	10KW(120V)

### Three Phase PCU

MODEL NAMES	RATING
EMERGE3PH5000	5KW(120V)
EMERGE3PH10000	10KW(240V)
EMERGE3PH15000	15KW(240V)
EMERGE3PH20000	20KW(240V)
EMERGE3PH30000	30KW(240V)



RATING	CHASIS DIMENSIONS (W x D x H)
5 to 6KW	300 x 650 x 720

RATING	CHASIS DIMENSIONS (W x D x H)
7.5 to 10KW	300 x 650 x 815

9 SERVICE CENTERS ALL OVER INDIA

## TECHNICAL SPECIFICATIONS FOR SINGLE PHASE PCU

	EMERGE1PH5000	EMERGE1PH6000	EMERGE1PH7500	EMERGE1PH8000	EMERGE1PH10000
Inverter Capacity	5KW	6KW	7.5KW	8KW	10KW
MPPT CONTROLLER					
Controlling Element	IGBT	IGBT	IGBT	IGBT	IGBT
MPPT Voltage Range	110-250	110-250	110-320	110-320	110-320
No. of MPPT Channels	1	1	1	1	1
MPPT Efficiency	>98%	>98%	>98%	>98%	>98%
INVERTER OUTPUT					
Controlling Element	IGBT & ARM	IGBT & ARM	IGBT & ARM	IGBT & ARM	IGBT & ARM
Output Voltage	220-240V	220-240V	220-240V	220-240V	220-240V
Output Frequency	47-53Hz	47-53Hz	47-53Hz	47-53Hz	47-53Hz
Operating Temperature	0-55 °	0-55 °	0-55 °	0-55 °	0-55 °
Peak Efficiency	Upto 91%	Upto 91%	Upto 91%	Upto 91%	Upto 91%
Humidity	5-95% Non-condensing	5-95% Non-condensing	5-95% Non-condensing	5-95% Non-condensing	5-95% Non-condensing
THD	<3%	<3%	<3%	<3%	<3%
Cooling System	Forced Cooling	Forced Cooling	Forced Cooling	Forced Cooling	Forced Cooling
Communication	RS-232, RS-485 by default, CAN bus on demand	RS-232, RS-485 by default, CAN bus on demand	RS-232, RS-485 by default, CAN bus on demand	RS-232, RS-485 by default, CAN bus on demand	RS-232, RS-485 by default, CAN bus on demand
Battery Voltage	96V	96V	96/120V	120V	120V
GRID CHARGING					
AC Input	200-240VAC	200-240VAC	200-240VAC	200-240VAC	200-240VAC
Frequency	47-53Hz	47-53Hz	47-53Hz	47-53Hz	47-53Hz
Charging Current	6A(settable)	6A(settable)	6A(settable)	6A(settable)	6A(settable)
GRID Charger Start Voltage (Settable)	1.8-2.3V (settable)	1.8-2.3V (settable)	1.8-2.3V (settable)	1.8-2.3V (settable)	1.8-2.3V (settable)
Grid Charger Current (Settable)	As per battery AH	As per battery AH	As per battery AH	As per battery AH	As per battery AH

## TECHNICAL SPECIFICATIONS FOR 3 PHASE PCU

	EMERGE3PH5000	EMERGE3PH10000	EMERGE3PH15000	EMERGE3PH20000	EMERGE3PH30000
Inverter Capacity	5KW	10KW	15KW	20KW	30KW
MPPT CONTROLLER					
Controlling Element	IGBT	IGBT	IGBT	IGBT	IGBT
MPPT Voltage Range					
No. of MPPT Panels	1	1	1	1	1
MPPT Efficiency	>98%	>98%	>98%	>98%	>98%
INVERTER OUTPUT					
Controlling Element	IGBT	IGBT	IGBT	IGBT	IGBT
Output Voltage	380-450V	380-450V	380-450V	380-450V	380-450V
Output Frequency	47-53Hz	47-53Hz	47-53Hz	47-53Hz	47-53Hz
Operating Temperature	0-50 °	0-50 °	0-50 °	0-50 °	0-50 °
Peak Efficiency	Upto 91%	Upto 91%	Upto 91%	Upto 91%	Upto 91%
Humidity	5-95% Non-condensing	5-95% Non-condensing	5-95% Non-condensing	5-95% Non-condensing	5-95% Non-condensing
THD	<3%	<3%	<3%	<3%	<3%
Cooling System	Forced Cooling	Forced Cooling	Forced Cooling	Forced Cooling	Forced Cooling
Communication	CAN BUS, RS-232, RS-485 by default, ETHERNET on demand.	CAN BUS, RS-232, RS-485 by default, ETHERNET on demand.	CAN BUS, RS-232, RS-485 by default, ETHERNET on demand.	CAN BUS, RS-232, RS-485 by default, ETHERNET on demand.	CAN BUS, RS-232, RS-485 by default, ETHERNET on demand.
Battery Voltage	120V	240V	240V	240V	240V
GRID CHARGING					
AC Input	385-460VAC	385-460VAC	385-460VAC	385-460VAC	385-460VAC
Frequency	47-53Hz	47-53Hz	47-53Hz	47-53Hz	47-53Hz
Charging Current	6A(settable)	6A(settable)	6A(settable)	6A(settable)	6A(settable)
GRID Charger Start Voltage (Settable)	1.8-2.3VPC( settable)	1.8-2.3VPC( settable)	1.8-2.3VPC( settable)	1.8-2.3VPC( settable)	1.8-2.3VPC( settable)
Grid Charger Current (Settable)	As per battery AH	As per battery AH	As per battery AH	As per battery AH	As per battery AH