





Key Features:-

- Operate on both Solar Power as well as Grid Power.
- It is integrated with in-built fully regulated MPPT Solar Charge Controller for maximum Solar Power utilization.
- It senses the availability of solar power, grid power and accordingly gives preference to charging through solar power and switches to the grid power if the solar power is not available.
- It is designed to give you maximum benefit from the solar energy and minimize your electricity bill drastically.
- Highly efficient battery charging from the solar energy as a result you will get non-stop power, save money, save electricity and protect the environment.
- Advanced ARM Cortex technology for absolute and stable and 100% pure sine wave output.
- · Inbuilt Isolation transformer for more reliability.
- User- friendly LCD for the display of mode of operation and all parameters.
- Intelligent overload sensing circuitry with auto retries facility.
- Programmable thermal protection: cooling fan which operates as needed.
- Pure Sine Wave Output with low Total Harmonic Distortion (THD).
- High End ARM-Cortex based design of Solar Charge Controller for charging through Solar Power.
- Solar PV reverse voltage Protection.
- Reverse Current Flow Protection from Battery to Solar Panel generally during night.
- No mechanical contact for charge Controller.

If solar is available and battery declared as full charged, then Mains will automatic cut till battery discharge upto pre-defined level in PCU mode.





BOOSTER MPPT

			TECHNICA	L SPECIFICATIO	N		
Parameters				Ratin	ng		
System Model Nam	Α		XE/2500/48V	XE/4000/48V	XE/5000/48V	XE/5500/96V	
Capacity			2500VA	4000VA	5000VA	5500VA	
Operating DC Volta	ge			48V		96V	
SwUPSching Elemen				Mosfet		IGBT	
Charger Topology							
Parameter (Gr	·id)			Variable Range			
Nominal Grid Volta							
Nominal Frequency				50Hz	!		
Frequency Range				45-55 Hz ±	± 1 Hz		
Battery Charging Method 4 Stage				Bulk/Absorption/F			
Grid - Battery	TUB (Default)	Boost		14.4V ± 0.2V (Ea			13.8V-15V
Charging Voltage	. 55 (500010)	Float		13.8V ± 0.2V (Ea			13V-14.2V
Grid - Battery	SMF	Boost		14.2V ± 0.2V (Ea			13.5V-14.2V
Charging Voltage		Float		13.8V ± 0.2V (Ea			13.5V-14.2V
Grid - Battery	Enable	Default		5A-18A			
Charging Current		Maximum					
	Disable	Normal/Boost					
	nnect @ Battery			11V-12.5V			
Grid Low Cut UPS Mode Enable				170V ± 1			
Voltage		de Disable					
Grid Low Cut		de Enable					
Recovery		de Disable					
Grid High Cut		de Enable					
Voltage Crid High Cut	1838, 763 (1818)/63	de Disable de Enable					
Grid High Cut							
Recovery	UPS Mode Disable						
Changeover (Batt. To Mains)	UPS Mode Enable/Disable						
Changeover (Mains To Batt.)	UPS Mode Enable/Disable						
DG Mode	Enable	/Disable					
Parameter (Ba	ttery Mode						
Output Phase							
Output Waveform							
Nominal Output Vo	ltage						
Max. Output Current			9.5A	13.5A	18A	18A	
Discharging Current			52A ± 2A	76A ± 2A 50Hz ±	105A ± 2A	52A ± 2A	
Nominal Frequency				50-60 Hz			
Battery Low Buzzer				Battery Low Cut +0.3V			
Battery Low Cut				10V - 11.5V			





BOOSTER MPPT

Parameters			Ratin	g				
System Model Name	XE/ 2500 /48V		XE/4000/48V	XE/5000/48V	XE/5500/96V			
CapacUPSy	2500VA		4000VA	5000VA	5500VA			
Typical Efficiency	≥ 80%		≥82%					
Voltage Harmonic	< 3% (Linear Load)							
	UPS Mode >110% 3-Times Auto Reset wUPSh 30Sec. Delay and 4th Time Shut Down Disable							
Over Load CapacUPSy	UPS Mode Enable	>110% 1st Time Shut Down after 30 Sec Delay.						
	>150% Output Goes Down							
Protection	Overload, Battery Low, Battery High, Over Temperature, Short Circuit, PV Reverse, PV High, Mains Fuse Trip, Grid Overload							
	S.No.	Switch	Functi		Switch Led Status			
	1	POWER	ON/OFF the UPS O	utput	SYSTEM ON - Led ON SYSTEM OFF - Led OFF			
Switches and LED Indication	3 4 5 Battery Voltage,	INV/UPS SMF/TUB HYBRID/PCU ONLY LED Solar Charging c	Setting". The Switches funct to: POWER - Enter/OK When it is short pr TUBULAR or SMF E When it is Short pr the Hybrid or PCU Solar status Green,	e Selection. essed Enables the titing. "Edit Parameters tion now change Switch. essed it enables Battery Selection. ressed it Enables Mode Selection.	UPS Mode ON - Led ON UPS Mode OFF - Led OFF TUBULAR Battery - Led ON SMF Battery - Led OFF PCU Mode - Led OFF PCU Mode - Led OFF Green LED ON - Full Solar Used Green LED Blinking - Partial Solar Used and Current, Grid Voltage, Grid			
Display	Frequency, Output Voltage, Outp Mode, Protection, Charging M		put Frequency,Load in % on Battery, L Iode, Solar Kwh(Saving),Solar availabil BRID/PCU LITE/ PCU ULTRA), UPS ON/		lity Status, Solar Working			
Photovoltaic Input		iviode(HY	BRID/FCU LITE/ PCU	OLINA), UPS ON	OFF.			
nput Voltage Range (Min - Max)		80 - 2	30 VDC		160 - 450 VDC			
laximum PV Power Recommended	3.0	KW	4.0KW	5.0 KW	5.0 KW			
plar Charge Controller Rating) A	60A	100 A	50 A			
MPPT Based Charging Controller			00/1	20071	307			
wching Element			IGBT					
ontroller			CARCOLIN DE LA	tex				
	ARM- Cortex MPPT							
ne of Charger	95%							
			95%					
ficiency								
ficiency arameter (Environment)			0 500	^				
fficiency arameter (Environment) perating Temprature			0 - 50°0	0				
fficiency arameter (Environment) operating Temprature ooling			Fan					
fficiency arameter (Environment) perating Temprature colling flax. Relative HumidUPSy @25°C (Non Condensing)			Fan 95%					
fficiency farameter (Environment) Operating Temprature Cooling Max. Relative HumidUPSy @25°C (Non Condensing) Hoise @ 1 Meter			Fan 95% 50dB					
Type of Charger Efficiency Parameter (Environment) Departing Temprature Cooling Max. Relative HumidUPSy @25°C (Non Condensing) Noise @ 1 Meter Standard Comiliance			Fan 95% 50dB IP20					
Efficiency Parameter (Environment) Operating Temprature Cooling Max. Relative HumidUPSy @25°C (Non Condensing) Noise @ 1 Meter	28	.34 430X400X500	Fan 95% 50dB	45	45.8 520X400X640			





MEGA MPPT

				TECHNICAL S	PECIFICATION	ON		
_								
Parameters					Rati			
System Model Nar	me		XE/7500/96V	XE/7500/120V		XE/15000/240V	XE/20000/360V	
Capacity			7500VA	7500VA	10KVA	15KVA	20KVA	
Operating DC Volta	_		96V	12		240V	360V	
SwUPSching Eleme	ent				IGBT Boost M			
Charger Topology	اله: ۵۱			Variable Days				
Parameter (G				Variable Rang				
lominal Grid Volta					230			
lominal Frequenc	y				50H			
Frequency Range Battery Charging Method 4 Stage					45-55 Hz Bulk/Absorption/	NACOS SERVE		
Grid - Battery		Boost			14.4V ± 0.2V (E			13.8V-15V
Charging Voltage	TUB (Default)	Float			13.8V ± 0.2V (E			13V-14.2V
Grid - Battery		Boost			14.2V ± 0.2V (E			13.5V-14.2V
Charging Voltage	SMF	Float			13.8V ± 0.2V (E			13.5V-14.2V
	rhl.	Default			15A ±			5A-18A
Grid - Battery	Enable	Maximum			18A ±	1A		
Charging Current	Disable	Normal/Boost						
Grid Reconnect @ Battery Voltage			11V-12.5V					
Grid Low Cut	UPS Mo	de Enable						
Voltage	UPS Mode Disable							
Grid Low Cut		de Enable						
Recovery		de Disable			110V ±			
Grid High Cut		de Enable						
Voltage		de Disable						
Grid High Cut	UPS Mode Enable							
Recovery Changeover	UPS Mode Disable			_				
(Batt. To Mains)	UPS Mode E	nable/Disable						
Changeover				_				
(Mains To Batt.)	UPS Mode Enable/Disable							
OG Mode	Enable	/Disable						
Parameter (B	attery Mode)				Disab			
Output Phase	,				1 Pha	se		
Output Waveform					Sinewa			
Nominal Output Voltage								
Max. Output Current			27A	27A	35A	54A	70A	
Discharging Currer	nt		76A ± 2A	52A ± 2A	72A ± 2A	52A ± 2A	52A ± 2A	
Nominal Frequenc	У			50-60 Hz				
Battery Low Buzze	r		10.8V ±.02V (Each Battery)					Battery Low Cut +0.3
Battery Low Cut			10.5V ±.02V (Each Battery)					10V - 11.5V





MEGA MPPT

Parameters	Rating							
System Model Name	XE/7500/96V	XE/7500/120V	XE/10000/120V		XE/20000/360V			
Capacity	7500VA	7500VA	10KVA	15KVA	20KVA			
Operating DC Voltage	96V		20V	240V	360V			
ypical Efficiency		30%		≥ 829				
oltage Harmonic		70	< 3% (Linea					
oltage Harmonic	UPS Mode >110% 3-Times Auto Reset wUPSh 30Sec. Delay and 4th Time Shut Down							
	Disable							
over Load CapacUPSy								
ver Load Capacorsy	25 25	UPS Mode >110% 1st Time Shut Down after 30 Sec Delay.						
	Enable		. 4500/ 0. 1	o				
D441			>150% Output	Goes Down				
Protection	Overload, Battery Low, Battery High, Over Temperature, Short Circuit, PV Reverse, PV High, Mains Fuse Trip, Grid Overload							
	S.No.	Switch	Funct		Switch Led Status			
	3.110.	SWITCH	rance	iongs	SYSTEM ON - Led ON			
	1	POWER	ON/OFF the UPS (Output	SYSTEM OFF - Led OFF			
			M/hamitia ahamtu		SYSTEM OFF - Led OFF			
			When it is short p					
			UPS/Inverter Mod					
			When it is Long pr					
			UPS Parameter Se					
	2	INV/UPS		Lait Parameters	UPS Mode ON - Led ON			
	_	INV/OF3	Setting".		UPS Mode OFF - Led OFF			
			The Switches func	tion now change				
			to: POWER - Enter/OK Switch.					
witches and LED Indication	3	SMF/TUB	When it is short pressed it enables		TUBULAR Battery - Led ON			
	5	SIVIF/TUB	TUBULAR or SMF	SMF Battery - Led OFF				
				ressed it Enables	PCU Mode - Led ON			
	4	HYBRID/PCU	HYBRID Mode - Led OFF					
		the Hybrid or PCU Mode Selection. HYBRID Mode - Led OFF Green LED ON - Full Solar Use						
					Green LED Blinking - Partial			
					Solar Used			
					Green LED OFF - No Solar			
					Used			
	5	ONLY LED	Solar status Green	/Red	Red LED ON – PV Reverse			
					Protection			
					Red LED OFF – No Protection			
					Selected			
				Selected				
			-	-	oad Current, Grid Voltage, Grid			
	Frequency, Output Voltage, Output Frequency, Load in % on Battery, Load in % on Solar, Charging Mode,							
Display		Protection, Charging Mode, Solar Kwh(Saving), Solar availability Status, Solar Working						
Display								
			e, Solar Kwh(Saving 'BRID/PCU LITE/ PC					
Photovoltaic Input	Protecti	Mode(HY	BRID/PCU LITE/ PC	U ULTRA), UPS ON	/OFF.			
Photovoltaic Input Input Voltage Range (Min - Max)	Protecti	Mode(HY 200 - 500 VDC	'BRID/PCU LITE/ PC	U ULTRA), UPS ON 300 - 625VDC	/OFF. 400 -750VDC			
Photovoltaic Input nput Voltage Range (Min - Max) Maximum PV Power Recommended	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	BRID/PCU LITE/ PC 200 - 500 VDC 10 KW	300 - 625VDC 15KW	/OFF. 400 -750VDC 20KW			
Photovoltaic Input nput Voltage Range (Min - Max) Maximum PV Power Recommended Golar Charge Controller Rating	Protecti	Mode(HY 200 - 500 VDC	'BRID/PCU LITE/ PC	U ULTRA), UPS ON 300 - 625VDC	/OFF. 400 -750VDC			
Photovoltaic Input Input Voltage Range (Min - Max) Maximum PV Power Recommended Solar Charge Controller Rating MPPT Based Charging Controller	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	200 - 500 VDC 10 KW 80 A	U ULTRA), UPS ON 300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW			
Photovoltaic Input Input Voltage Range (Min - Max) Maximum PV Power Recommended Iolar Charge Controller Rating MPPT Based Charging Controller	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	BRID/PCU LITE/ PC 200 - 500 VDC 10 KW	U ULTRA), UPS ON 300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW			
Photovoltaic Input Input Voltage Range (Min - Max) Maximum PV Power Recommended Iolar Charge Controller Rating MPPT Based Charging Controller Iowitching Element Controller	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	200 - 500 VDC 10 KW 80 A	U ULTRA), UPS ON 300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW			
hotovoltaic Input nput Voltage Range (Min - Max) Maximum PV Power Recommended olar Charge Controller Rating MPPT Based Charging Controller witching Element ontroller	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	200 - 500 VDC 10 KW 80 A	U ULTRA), UPS ON 300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW			
Photovoltaic Input Input Voltage Range (Min - Max) Maximum PV Power Recommended Input Voltage Controller Rating Input Voltage Controller Input Vol	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	ZOO - 500 VDC 10 KW 80 A IGBT DSP	U ULTRA), UPS ON 300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW			
hotovoltaic Input Input Voltage Range (Min - Max) Maximum PV Power Recommended Input Voltage Controller Rating INPPT Based Charging Controller Witching Element Input Controller	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	ZOO - 500 VDC 10 KW 80 A IGBT DSP MPP	U ULTRA), UPS ON 300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW			
Photovoltaic Input Input Voltage Range (Min - Max) Maximum PV Power Recommended Isolar Charge Controller Rating MPPT Based Charging Controller Iswitching Element Controller Type of Charger Ifficiency Parameter (Environment)	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	ZOO - 500 VDC 10 KW 80 A IGBT DSP MPP	U ULTRA), UPS ON 300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW			
Photovoltaic Input Input Voltage Range (Min - Max) Maximum PV Power Recommended Isolar Charge Controller Rating MPPT Based Charging Controller Iswitching Element Controller Isype of Charger Ifficiency Parameter (Environment) Operating Temprature	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	200 - 500 VDC 10 KW 80 A IGBT DSP MPP 95% 0 - 50°	U ULTRA), UPS ON 300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW			
Photovoltaic Input Input Voltage Range (Min - Max) Maximum PV Power Recommended Golar Charge Controller Rating MPPT Based Charging Controller Switching Element Controller Type of Charger Efficiency Parameter (Environment) Operating Temprature Cooling	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	200 - 500 VDC 10 KW 80 A IGBT DSP MPP 95% 0 - 500 Fan	300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW			
Photovoltaic Input Input Voltage Range (Min - Max) Maximum PV Power Recommended Solar Charge Controller Rating MPPT Based Charging Controller Switching Element Controller Type of Charger Efficiency Parameter (Environment) Operating Temprature Cooling Max. Relative HumidUPSy @25°C (Non Condensing)	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	200 - 500 VDC 10 KW 80 A IGBT DSP MPP 95% 0 - 500 Fan 95%	300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW			
Photovoltaic Input Input Voltage Range (Min - Max) Maximum PV Power Recommended Solar Charge Controller Rating MPPT Based Charging Controller Switching Element Controller Type of Charger Efficiency Parameter (Environment) Operating Temprature Cooling Max. Relative HumidUPSy @25°C (Non Condensing) Noise @ 1 Meter Standard Comliance	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	200 - 500 VDC 10 KW 80 A IGBT DSP MPP 95% 0 - 500 Fan 95% 50d6	300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW			
Photovoltaic Input Input Voltage Range (Min - Max) Maximum PV Power Recommended Solar Charge Controller Rating MPPT Based Charging Controller Switching Element Controller Type of Charger Efficiency Parameter (Environment) Operating Temprature Cooling Max. Relative HumidUPSy @25°C (Non Condensing) Noise @ 1 Meter Standard Comliance	Protecti 160 - 450 VDC 7.5 KW 75A	Mode(HY 200 - 500 VDC 7.5 KW 60 A	200 - 500 VDC 10 KW 80 A IGBT DSP MPP 95% 0 - 50' Fan 95% 50dE	300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW 80A			
Photovoltaic Input Input Voltage Range (Min - Max) Maximum PV Power Recommended Solar Charge Controller Rating MPPT Based Charging Controller Switching Element Controller Type of Charger Efficiency Parameter (Environment) Operating Temprature Cooling Max. Relative HumidUPSy @25°C (Non Condensing) Noise @ 1 Meter	Protecti 160 - 450 VDC 7.5 KW	Mode(HY 200 - 500 VDC 7.5 KW	200 - 500 VDC 10 KW 80 A IGBT DSP MPP 95% 0 - 500 Fan 95% 50d6	300 - 625VDC 15KW 60A	/OFF. 400 -750VDC 20KW			