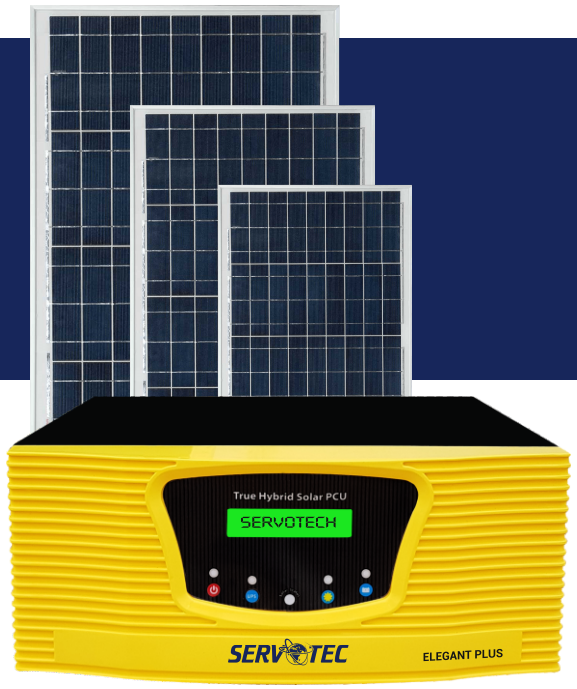
SERVOTEC
smart power solutions



ELEGANT PLUS

PWM SERIES PCU

CORE FEATURES

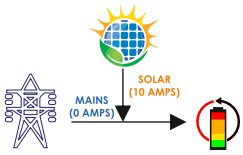
INTELLIGENT MODES

PURE SINE WAVE

TRUE CV CC PWM

LCD DISPLAY

ADVANCED DSP TECHNOLOGY



AI CHARGE SHARING

- Big Display for Data
- Maximized Solar Usage through Intelligent modes.
- Incorporated with Microchip and ST DSP Engines
- Safety and Protections
- 5 Stage Battery Charging
- Multiple Battery Selection
- Sleek & Aesthetic design
- Works as standalone Solar Inverter in case of No-Grid

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ELEGANT PLUS

PWM SERIES PCU

Elegant Plus- PWM Solar PCU Technical Specifications

Parameters			Rating					Adjustable Range
Model			EP-PCUOGP-1112/S11	EP-PCUOGP-1512/S11	EP-PCUOGP-2224/S11	EP-PCUOGP-2724/S11	EP-PCUOGP-3524/S11	
Capacity			800VA	1150VA	1715VA	2150VA	2850VA	
Operating DC Voltage			12V		24V			
Typical Efficiency			≥80%		≥82%			
Switching Element			MOSFET					
Charger Topology			Boost MOSFET					
Parameters (Grid)								
Nominal Grid Voltage			230V					
Nominal Frequency			50Hz					
Frequency Range			45-55Hz					
Output PF.			0.7					
Battery Charging Method (5 Stage)			Soft Start/Bulk/Absorption/Float/Equalize					
Grid-Battery Charging	TUB (Default)	Boost	14.4V ± 0.2V (Each Battery)					13.8V - 15V
		Float	13.8V ± 0.2V (Each Battery)					13V - 14.2V
Grid-Battery Charging	SMF	Boost	14.2V ± 0.2V (Each Battery)					13.5V - 14.2V
		Float	13.8V ± 0.2V (Each Battery)					13.5V - 14.2V
Grid-Battery Charging Current	Enable	Default	15A ± 1A					5A - 18A
		Maximum	18A ± 1A					
	Disable	Normal/Boost	Charging Current 0.0A					
Grid Reconnect @Battery Voltage			11.7V ± 0.2V (Each Battery)					11V - 12.5V
Grid Low Cut Voltage	UPS Mode Enable		170V ± 10V					
	UPS Mode Disable		100V ± 10V					
Grid Low Cut Recovery	UPS Mode Enable		180V ± 10V					
	UPS Mode Disable		110V ± 10V					
Grid High Cut Voltage	UPS Mode Enable		265V ± 10V					
	UPS Mode Disable		290V ± 10V					
Grid High Cut Recovery	UPS Mode Enable		255V ± 10V					
	UPS Mode Disable		280V ± 10V					
Changeover (Batt. to Mains)	UPS Mode Enable/Disable		<6ms					
Changeover (Mains to Batt.)	UPS Mode Enable/Disable		<25ms					
DG Mode	Enable/Disable		Disable					
Parameters (Battery Mode)								
Output Phase			Single Phase					
Output Waveform			Sinewave					
Nominal Output Voltage			220V ± 5%					
Max. Output Current			2A	2.7A	4.20A	5.1A	7A	
Nominal Frequency			50Hz ± 1					50Hz
Battery Low Buzzer			10.8V ± 0.02V (Each Battery)					10.5V - 11.1V
Battery Low Cut			10.5V ± 0.02V (Each Battery)					10V - 11.5V
Battery High Cut			16.5V ± 0.02V (Each Battery)					16.5V - 17.5V
Voltage THD			<3% (Linear Load)					
Overload Capacity			UPS Mode Disable	>110% 3-Times Auto Reset with 30sec. Delay and 4th Time Shut Down.				
			UPS Mode Enable	>110% 1st Time Shut Down after 30sec. Delay				
			>150% Output Goes Down, Shut Down with 10 sec. delay					
Protection			Overload, Battery Low, Battery High, Over Temperature, Short Circuit, PV Reverse, PV High, Mains Fuse Trip, Grid Overload, Wiring Fault					
Switches and LED Indication			S.No.	Switch	Function(s)	Switch LED Status		
			1	POWER	ON/OFF UPS Output	SYSTEM ON - LED ON , SYSTEM OFF - LED OFF		
			2	Inverter/UPS	When it is Short Pressed it Enable UPS/Inverter Mode Selection. When it is long Pressed Enables the UPS Parameter Setting.	UPS Mode ON - LED ON , UPS Mode OFF - LED OFF		
			3	SMF/TUB	When it is Pressed it Enables TUBULAR/SMF Battery Selection	TUBULAR Battery - LED ON , SMF Battery - LED OFF		
			4	Hybrid/PCU	When it is short pressed it enables Hybrid/PCU Mode Selection	PCU Mode - LED ON, Hybrid Mode - LED OFF		
			5	Only LED	Solar Status Green/Red	Green LED ON - Full Solar used , Green LED Blinking - Partial Solar used , Green LED OFF - No Solar used , Red LED ON - PV Reverse Protection, Red LED OFF - No Protection Selected		
Display			Battery Voltage, Solar Charging Current, Grid Charging Current, Solar Load Current, Grid Voltage, Grid Frequency, Output Voltage, Output Frequency, Load in % on Battery, Load in % on Solar, Charging Mode, Protection, Charging Mode, Solar Kwh(Saving), Solar Availability Status, Solar Working Mode (Hybrid/PCU Lite/PCU Ultra), UPS ON/OFF					
Parameters (Solar)								
Switching Element			MOSFET					
Operating Mode	HYBRID/PCU LITE/PCU ULTRA		Hybrid					
Type of charger			PWM					
SPV Charging Voltage	TUB	Boost	15V ± 0.02V (Each Battery)					14.2V - 15.5V
		Float	14.2V ± 0.02V (Each Battery)					13.8V - 14.5V
SPV Charging Voltage	SMF	Boost	14.3V ± 0.02V (Each Battery)					13.5V - 14.5V
		Float	13.9V ± 0.02V (Each Battery)					13.5V - 14V
Efficiency			≥97%					
Solar Current Min.			>1A (Below 1A, System will act like Solar Absent)					
Solar Current Max.			30A	50A				
Input Voltage Range (Min - Max) Voc			17V - 25V		31V - 45V			
Maximum PV Power Recommended			550W	1000W	1800w		2000w	
Parameters (Environment)								
Operating Temperature			0 - 50°C					
Cooling			Fan					
Max. Relative Humidity@25°C (Non-condensing)			95%					
Noise @1metre			50dB					
Standard Compliance			IP20					
Weight (Kg) Gross			9.4kg	10.0kg	12.0kg	16.0kg	18.0kg	
Dimension LxWxH (mm)			390X335X225			395X385X270		

Note:- Elegant plus 3524 model support to 1HP branded submersible pumps.

*Due to continuous improvement technical specifications & product image can change without prior notice.