

ELEGANT UNIK

PWM SERIES PCU



CORE FEATURES



**INTELLIGENT
MODES**



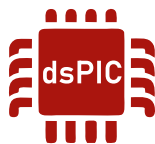
**PURE
SINE WAVE**



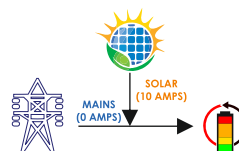
**TRUE CV CC
PWM**



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



Elegant Unik- PWM Solar PCU Technical Specifications						
Parameters			Rating		Adjustable Range	
Model			EU-PCU0GP-2012/S11		EU-4024/S11	
Capacity			1600VA		3000VA	
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			0.8			
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	Enable	Default	15A ± 1A		5A - 18A	
		Maximum	18A ± 1A			
Current	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 Wattage (Bulb Load)			4.2A	8.5A		
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			
Type of charger			Hybrid 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			50A			
Input Voltage Range (Min - Max) Voc			17V - 25V		31V - 45V	
Maximum PV Power Recommended			1000W		2000W	
Parameters (Environment)						
Operating Temperature			0 - 50°C			
Cooling			Fan			
Max. Relative Humidity@25°C (Non-condensing)			95%			
Noise @1 metre			50dB			
Standard Compliance			IP20			
Weight(Kg) Gross			12kg		21.5kg	
Dimension LxWxH (mm)			395X335X225		395X385X270	
Note:- Elegant Unik 2012/S11 model support to 1HP branded Tullu pumps. Elegant Unik 4024/S11 model support to 1HP any make submersible pump.						

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