

Features:

- ▶ Compatible With 24v Solar Panels.
- ▶ Real-Time Clock for Better Utilization of Solar Power
- ▶ Solar PV Reverse Voltage Protection
- ▶ Pure Sine Wave Technology

**Advantages & Applications:****VIPS TR-1500**

- ▶ This PCU is Compable with 24V Panel (i.e Range 335W To 550W)
- ▶ Intelligent Solar Selecon based on built-in Real Time Clock (R.T.C.).
- ▶ Maximum utilisation of Solar Power through monitoring of abrupt weather conditions.
- ▶ Maximum Grid Power Saving by charging through "Power saving" Buon.
- ▶ Provision for seng Critical Parameters of Solar.
- ▶ Solar KWH used on digital display.
- ▶ Solar PV reverse voltage protecon.
- ▶ Advanced Pure Sine Wave Technology.
- ▶ Interacve Multicolour LCD display.
- ▶ Remote Monitoring & Controlling of the System through Wi-fi / GSM /Bluetooth Via Web or Android App.(Optional).

VIPS TR-6500

- ▶ Power Saving feature to conserve electricity, saving up to 3 units* per day.
- ▶ This PCU is capable of powering heavy loads like Inverter AC, Fridge, Washing machine, Press, Cooler etc.
(NOTE: Please Consult your installer before running AC & Heavy Appliances.)
- ▶ Intelligent Solar Selection based on a built-in Real Time Clock (R.T.C.).
- ▶ Two Channel Interleaved MPPT Solar Charge Controller from single PV input.
- ▶ Maximum Grid Power Saving by charging through the "Power saving" Button.
- ▶ Provision for setting Critical Parameters of Solar.
- ▶ Solar KWH used on digital display.
- ▶ Solar PV reverse voltage protection.
- ▶ Electronic over current charging protection.
- ▶ Advanced Pure Sine Wave Technology.

VIPS TR-18000/240V

- ▶ This PCU is Compatible with 3 Nos 24V Panel (i.e Range 335W To 590W)
- ▶ Intelligent Solar Selection based on a built-in Real Time Clock (R.T.C.).
- ▶ Maximum utilization of Solar Power through monitoring of abrupt weather conditions.
- ▶ Maximum Grid Power Saving by charging through the "Power saving" Button.
- ▶ Provision for setting Critical Parameters of Solar.
- ▶ Solar KWH used on digital display.
- ▶ Solar PV reverse voltage protection.
- ▶ Electronic over current charging protection.
- ▶ Advanced Pure Sine Wave Technology.
- ▶ Interactive Multicolor LCD display.

Technical Specifications

S.No	TECHNICAL PARAMETERS	SPECIFICATION		
		TR1500	TR6500	TR18000
A	BATTERY MODE			
A.1	No Load Current (Switch OFF)	≤ 180 mA	≤ 250 mA	≤ 180 mA
A.2	Nominal Battery Voltage	12V	48V	240V
A.3	Output Voltage at No LOAD	225±7V	230 ± 3% V	230V±3 %
A.4	Output Frequency	50 ± 1 Hz	50 ± 1Hz	50 ± 1Hz
A.5	Discharging Current @Full Load	75 ± 1 Amp	103 ± 1 Amp.	55 ± 1Amp
A.6	Harmonic distortion in O/P waveform(Resistive load)	≤ 3%	≤ 3%	≤ 3%
B	UPS MODE			
B.1	Low Cut With Phase Match	180 ± 10V	180 ± 10V	180 ± 10V
B.2	Low Cut Recovery With Phase Match	9-12V Hysterisis from > Low Cut Voltage	9-12V Hysterisis from > Low Cut Voltage	9-12V Hysterisis from > Low Cut Voltage
B.3	High Cut With Phase Match	270 ± 10V	270 ± 10V	260 ± 10V
B.4	High Cut Recovery With Phase Match	9-12V Hysterisis from < High Cut Voltage	9-12V Hysterisis from < High Cut Voltage	9-12V Hysterisis from < High Cut Voltage
B.5	Change Over Time From Mains to UPS	≤ 10msec	≤ 10msec	≤ 10msec
B.6	Change Over Time From UPS to Mains	≤ 10msec	≤ 10msec	≤ 10msec
C	NORMAL MODE			
C.1	Low Cut With Phase Match	100 ± 10V	100 ± 10V	100 ± 10V
C.2	Low Cut Recovery With Phase Match	9-12V Hysterisis from > Low Cut Voltage	9-12V Hysterisis from > Low Cut Voltage	9-12V Hysterisis from > Low Cut Voltage
C.3	High Cut With Phase Match	270 ± 10V	290 ± 10V	280 ± 10V
C.4	High Cut Reovery With Phase Match	9-12V Hysterisis from < High Cut Voltage	9-12V Hysterisis < High Cut Voltage	9-12V Hysterisis < High Cut Voltage
C.5	Change Over Time From Mains to Inverter	≤ 10msec	≤ 40msec	≤ 40msec
C.6	Change Over Time From Inverter to Mains	≤ 10msec	≤ 10msec	≤ 10msec
D	CHARGING MODE			
D.1	Low Charging Current @ 220V AC (NC)	13.5 ± 1.0A	18.0 ± 1.0A	12.0 ± 1.0A
D.2	High Charging Current @ 220V AC (HC)	18 ± 1.0A	24.0 ± 1.0A	16.0 ± 1.0A
D.3	Boost Charging Voltage (HC/NC)	14.4 ± 0.2V	14.4 ± 0.2V (per Battery)	14.4 ± 0.2V (per Battery)
D.4	Float Charging Voltage (HC/NC)	13.7 ± 0.2V	13.7 ± 0.2V (per Battery)	13.7 ± 0.2V (per Battery)
E	Solar Charge Controller With Real Time Clock			
E.1	Solar Charge Controller	MPPT CHARGE CONTROLLER (50 Amp)	MPPT CHARGE CONTROLLER (63A)	MPPT CHARGE CONTROLLER (63A)
E.2	Charge Controller Type	SINGLE CHANNEL INTERLEAVED MPPT	SINGLE CHANNEL INTERLEAVED MPPT	SINGLE CHANNEL INTERLEAVED MPPT
E.3	Max PV input Power	550-850 Watt	4900-5360	14750-16500 Watt
E.4	Max Solar Input Voltage range (Vmpp)	25- 50	68V- 150V	340-440 V
E.5	Max Solar DC Input Voltage (Voc)	60V	195V	550 V
E.6	Solar Battery Charging Current (settable)	30±1Amp	40 Amps.(default) (Settable 5A to 50A)	40 Amps.(default) (Settable 5A to 50A)
E.7	Max. Solar Input Current	40 Amps.(default) (Settable 5A to 50A)	40 A	40 A
F	PROTECTION			
F.1	Over Load Protection with Alarm	Over Load Shut Down After 6 Auto Retries	Over Load Shut Down After 6 Auto Retries	Over Load Shut Down After 6 Auto Retries
F.2	Over Load Shut Down Reset	Through ON/OFF Switch or Mains	Through ON/OFF Switch or Mains	Through ON/OFF Switch or Mains
F.3	Battery Low Alarm	10.8±0.2V	10.8±0.2V	10.8±0.2V
F.4	Battery Low Protection	Battery Low Shut Down After 4 Auto Retries	Battery Low Shut Down After 4 Auto Retries	Battery Low Shut Down After 4 Auto Retries
F.5	Battery Low Shut Down Reset	Through ON/OFF Switch , Mains or Solar	Through ON/OFF Switch , Mains or Solar	Through ON/OFF Switch , Mains or Solar
F.6	Over Temperaturure Protection With Alarm	should be OK(95 ± 5 °C);	should be OK(95 ± 5 °C);	should be OK(95 ± 5 °C);
F.7	Short Circuit @ Mains Mode	Mains PCB Trip	Mains PCB Trip	Mains PCB Trip
F.8	Short Circuit Protection (Battery Mode)	Yes	Yes	Yes
F.9	Short Circuit Retry (Battery Mode)	One	One	One
F.10	Short Circuit Reset (Battery Mode)	Through ON/OFF Switch or Mains	Through ON/OFF Switch or Mains	Through ON/OFF Switch or Mains
F.11	Mains MCB Trip	Functional	Functional	Functional
F.12	P.V. REVERSE PROTECTION WITH ALARM	Available	Available	Available
ACCESSIBLE PARAMETERS VIO OPERATING DISPLAY				
G.1	AC MAINS VOLTAGE			
G.2	O/P LOAD IN %			
G.3	BATTERY INPUT VOLTAGE			
G.4	BATTERY CHARGING / DISCHARGING CURRYNT (BAR GRAPH)			
G.5	SOLAR KWH USED			
G.6	SOLAR STATUS			
G.7	Warnings or Protections Status			
Logic:	Smart Solar Selection Logic based on built in Real Time Clock (SL-1,SL-2,SL-3,SL-4).			
	Provision for Charging by Solar Power Only.			
	Provision for setting Critical Parameters of Solar.			
	Ability to provide rated output power directly from solar panels (if solar is available) in addition charges the battery			
Intelligently give the priority to solar power and take the balance from Mains.				