

Energy Plus – Basic/Classic/Supreme

Proven reliability

The full bridge plus toroidal transformer topology has proven its reliability over many years. The inverter is short circuit proof and protected against overheating, whether due to overload or high ambient temperature.

Power Control - Dealing with limited generator, shore side or grid power (800VA/1200VA)

With the Multi Control Panel a maximum generator or shore current can be set. The MultiPlus will then take account of other AC loads and use whatever is extra for charging, thus preventing the generator or shore supply from being overloaded.

Power Assist - Boosting the capacity of shore or generator power (800VA/1200VA)

Where peak power is so often required only for a limited period, the MultiPlus will make sure that insufficient shore or generator power is immediately compensated for by power from the battery. When the load reduces, the spare power is used to recharge the battery.

High start-up power

Needed to start high inrush loads such as power converters for LED lamps, halogen lamps or electric tools.

Search Mode

When Search Mode is 'on', the power consumption of the inverter in no-load operation is decreased by approx. 70%. In this mode the Multi, when operating in inverter mode, is switched off in case of no load or very low load, and switches on every two seconds for a short period. If the output current exceeds a set level, the inverter will continue to operate. If not, the inverter will shut down again.

Programmable relay

By default, the programmable relay is set as an alarm relay, i.e. the relay will de-energise in the event of an alarm or a pre-alarm (inverter almost too hot, ripple on the input almost too high, battery voltage almost too low).



Technical Data				
Sl.No	Technical Description	Energy Plus - Basic	Energy Plus - Classic	Energy Plus – Supreme
Solar PV Module				
1	Nominal Power Capacity (Wp)	780	780	1280
2	Roof Area Required (Sq. Ft)	78	78	
3	Estimated Daily Usable Energy (kWh)	3120	3120	5120
Inverter				
4	Nominal Input DC Voltage (Vdc)	12	24	24
5	Input voltage range (Vdc)	9.5 – 17	19-33	38-66
6	'Heavy duty' AC output -Current (A)	16		
7	Output - Single Phase AC (3 wire)	Voltage: 230 V (± 2%), Frequency: 50 Hz (± 0.1%)		
8	Continuous output power (VA)	800	800	1200
9	Peak output power (W)	1600	1600	2400
10	Maximum efficiency (%)	92	93	94
Battery Charger				
11	AC Input - Single Phase (3 wire)	Voltage range: 187-265V, Frequency: 45 – 65Hz, Power factor: 1		
12	Charge voltage 'absorption' (V)	14.4	28.8	28.8
13	Charge voltage 'float' (V)	13.8	27.6	27.6
14	Storage mode (V)	13.2	26.4	26.4
15	Charge current (A)	35	16	25
16	Battery temperature sensor	Yes		
17	Protection	Output Short Circuit, Overload, Battery Voltage too high, Battery Voltage too low, Temperature too high, Input Voltage Ripple too high		
Solar Charge Controller				
18	Model	MPPT 100/30	MPPT 100/30	MPPT 100/50
19	Maximum output current (A)	30	30	50
20	Maximum PV open circuit voltage (V)	100	100	100
21	Maximum efficiency (%)	98		
22	Self-consumption (mA)	30	30	20
23	Charge voltage 'absorption', (V)	14.4/28.8(adjustable)		
24	Temperature compensation (mV/°C)	(-16) to (-32)		
25	Protection	Output Short Circuit, Overload, Battery Voltage too high, Battery Voltage too low, Temperature too high, Input Voltage Ripple too high		
Common Characteristics				
26	Operating temp. range	-20 to +50°C (fan assisted cooling)		
27	Humidity (non-condensing) (%)	max 95		
Standards				
28	Safety	EN-IEC 60335-1, EN-IEC 60335-2-29, EN 62109-1		
29	Emission / Immunity	EN 55014-1, EN 55014-2, EN-IEC 61000-3-2, EN-IEC 61000-3-3 IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-3		
30	Road vehicles	ECE R10-4		
Battery				
31	Type	Solar Tubular GEL		
32	Operating Voltage (V)	12	24	24
33	Capacity (Ah)	240	120	200
34	Battery Backup (at full load) *	2 Hrs		

* Higher backup battery also can be supplied

Solar Corona Energy Private Limited

Corporate Office: #32/21, 19th A Cross, Behind Coffee Board Layout Park, Bhuvaneshwari Nagar, Bangalore-560024.
Ph: 080-22330430/31; Email: info@coronaenergy.co; Web: www.coronaenergy.co