

Specifications of 1 kW - 30 kW Solar PCU-IE for Off Grid application



Power plant Rating kW	1	2	3	4	5	6	7.5	10	20	30
Input Voltage (nom) Vdc	48	48/96	48/96	96/120	96/120	120	120/240	120/240	120/240	240
PV Input Voltage (max)	96	96/192	96/192	240	240	240	240/400	240/400	200/400	400
AC Input	230V, 1-ph									
Charge controller	MPPT type									
AC Charging current for Battery charging	10 A to 100A Depending on the requirement.									
Inverter continuous output rating KW	1	2	3	4	5	6	7.5	10	20	30
Inverter Output voltage Vac	230V, 1-ph	230V, 1-ph	230V 1 ph / 415V, 3-ph	230V 1 ph / 415V, 3-ph	230V 1 ph / 415V, 3-ph	230V 1 ph / 415V, 3-ph	230V 1 ph / 415V, 3-ph	230V 1 ph / 415V, 3-ph	230V 1 ph / 415V, 3-ph	230V 1 ph / 415V, 3-ph
Output frequency	50 Hz +/-1Hz									
Output voltage regulation	+/- 1% from no load to full load									
Overload	125% for 60 sec and 150% for 10 s									
Output wave shape	Sinusoidal									
Load Power factor	0.8 Lag/Lead									
THD	< 3% with load PF from 0.8 Lag to 0.8 Lead									
Efficiency (DC - AC)	> 90% at full load									
Charge controller Efficiency	Upto 98% depending on capacity									
AC Charger Efficiency	Upto 95% depending on capacity									
Ambient temperature	0- 40 deg C without derating, optional upto 55 Deg C									
Humidity	0-95% RH									
No load Current	< 2% of the rated capacity									
Metering and Instrumentation	LCD/LED display - With Grid- AC in, Temperature, Mains Charging On, Mains Charging Off Inverter Mode- Battery Voltage, AC Input Voltage, AC Output Voltage, Load wattage, Temperature,									
Staus indications	System On, Grid Charging, Load On Grid, Solar On									
System parameters	All system parameters shall be displayed on LCD display such as battery voltage, output(load) voltage, load current etc									
Protection	Exceeds Heat, Battery Low, Over Load, Short Circuit									
Input connection	From DCDB, incomer MCB/MCCB provided in inverter cabinet for input isolation									
Output connection	To ACDB, outcomer MCB/MCCB provided in inverter cabinet for load isolation									
Battery connection	To battery bank through battery Fuse									
Type of cooling	Forced air cooled									
Enclosure construction	CRCA metal sheet with powder coated paint shade (7032)									
Enclosure protection	IP 21									
Mounting	Floor standing									
Cable Entry	Rear Bottom cable entry									
Battery type	Compatible with all types of Lead acid Flooded/VRLA/SMF OR Ni CD									
Data logging	Optional - Logs AC/DC Kwh, Voltage , current Parameters through RS-485, Ethernet, GSM based - Detailed list will be provided seperately when required									
Potential free contacts	Optional -3 PFC provided for Input on, output on and Trip									
Operation Mode	Stand alone, Off-Grid & Hybrid									
Isolation	Built in Isolation transformer at Inverter									
Operation Mode	OFF-Grid : Solar -Battery - Grid. We can also supply Grid share type where the priority is Solar-Grid-Battery optionally									
IEC Certificates	61683:1999 (Efficiency) 60068-2-1, (2-2,14,30) (Environment)									