Specifications of 1 kW - 100 kW Solar PCU-3P for Off Grid application

Power-one Micro Systems Pvt. Ltd.

Power plant Rating kW	1	2	3	4	5	6	7.5	10	20	30	40	50	60	80	100
Input Voltage (nom) Vdc	48	48/96	48/96	96/120	120/144	120/144	120/240	120/240	120/240	240	240	240	240	240	240
PV Input Voltage (max)	96	96/192	96/192	240	240	240/400	240/400	240/400	240/400	400	400	400	400	400	400
AC Input	230V, 1-ph						230V, 1-ph/415V, 3-ph	230V, 1-ph/415V, 3-ph	415V, 3-ph						
Charge controller	MPPT type														
ACCharging 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	40	50	60	80	100
Inverter Output voltage Vac	230V, 1-ph		230V 1 ph / 415V, 3-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	Sine wave														
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 Instrumenation	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	Excees 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 20														
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)														