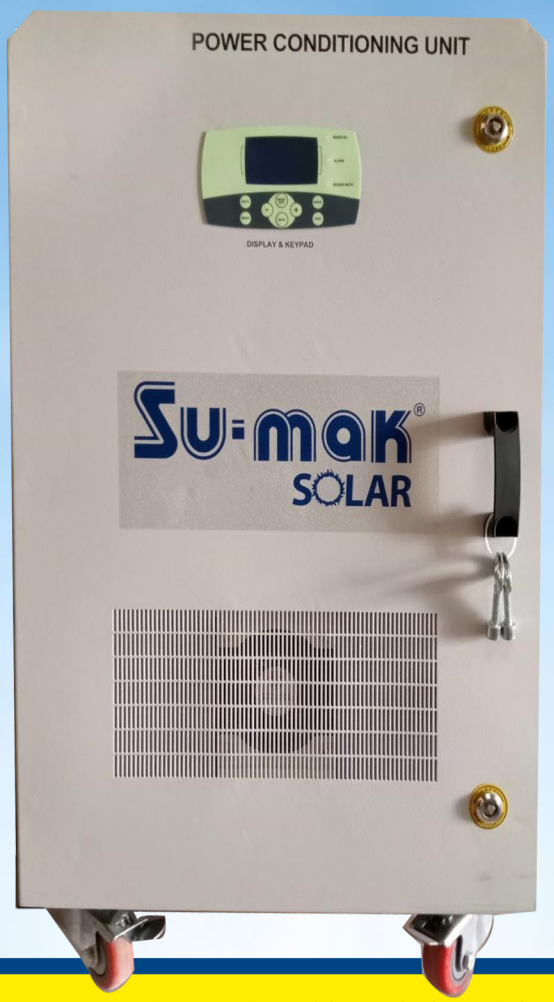
MADE IN INDIA

Su-mak® SOLAR

MPPT SOLAR HYBRID PCU

Smart Features:

- Excess power export to Grid
- Grid synchronization with storage
- MPPT Based Technology
- Li-ion Battery Compatible
- 100% utilization of Solar
- BESS solution
- User scheduling available



www.sumaksolar.com

20kVA/240V I 30kVA/240V I 40kVA I 50kVA I 80kVA I 100kVA

Technical Specifications Solar Power Conditioning Unit

Model	SU 10K120	SU 20K240	SU 30K240	SU 40K240	SU 60K240	SU80K240	SU 100K240
Inverter rating	10kVA	20kVA	30kVA	40kVA	60kVA	80kVA	100kVA
Nominal Battery Voltage	120V	240V					
No. of Phases	3 Phase						
Solar Charge Controller							
Charge Controller Type	MPPT						
Charger Topology	Buck Type						
No. of MPPT Channel	1 Channel					3 Channels	
Maximum PV Array Capapcity	10kW	20kW	30kW	40kW	60kW	80kW	100kW
Maximum Open Circuit PV Volts (Voc)	320V	620V					
MPPT Range @ operating Voltage	165V-266V	330V-515V					
Maximum Efficiency	> 94%						
Solar Inverter							
Nominal Output Voltage (RMS)	415VAC						
Output Voltage Regulation	± 2% RMS						
Output Frequency	50Hz ± 0.5Hz						
Wave form	Pure Sine Wave						
THD	<5%						
Load Power Factor	0.8 lag to Unity						
Efficiency: Peak | 100% Load| 20% Load	>92% | > 90% |> 85%						
Overload 60 sec/ 30 sec / 5 sec	110% | 125% | 150%						
Battery							
Battery Types Supported	Lead Acid Tall Tubular/AGM/ GEL/Ni Cd						
Charging Algorithm	Three Stage (Bulk, Boost, Float)						
Low Battery Alarm (per battery)	10.5VDC ± 0.3V						
Low Battery Cut Off (per battery)	10.0VDC ± 0.3V						
High Voltage Alarm (per battery)	16.0VDC ± 0.3V						
High Battery Voltage recovery (per battery)	15.5VDC ± 0.3V						
Grid Charger							
Input Voltage Range (Normal Mode)	330V to 450V						
Max. Charging Current	5A to 200Ah subjected to Batterty capacity & Inverter rating						
Boost Charging Voltage (per battery)	14VDC to 15VDC ± 0.2VDC (User Programmable)						
Boost Charging Voltage (Factory Default)	14.4 ± 0.2 VDC (for TT), 13.8 ± 0.2 VDC (for SMF)						
Float Charging Voltage (Factory Default)	13.7 ± 0.2 VDC per Battery (TT), 13.5 ± 0.2 VDC (for SMF)						
Protections							
	AC Over Voltage	Battery Over Voltage	O/P Over Load	O/P Short Circuit	O/P Short Circuit	Battery Under Voltage	PV Over Voltage
	AC Under Voltage	AC Under Frequency		AC Under Frequency	AC Under Frequency	Battery Reverse Polarity	PV reverse polarity
User Interface							
	Inverter Voltage	Battery Charging	Inverter/Grid frequency	Battery Voltage	Battery Voltage	PV Power (kW)	Inverter frequency
	Inverter Current	Battery Current		Battery Current	Battery Current	PV Voltage	Battery Charging
Miscellaneous							
Degree of Protection	IP 21						
Housing	Floor Standing						
Type of Cooling	Forces Fan Temperature Controlled						
Others							
Operating Temperature	0° C ~ +50 ° C						
Storage Temperature	-25° C ~ +50 ° C						
Audible Noise	60dB Max						
Maximum Relative Humidity @25° C	Upto 95% (non-condensing)						
Display	LED + LCD						
Standard Compliances	IEC 61683,IEC 60068-2(1,2,14,30(, IEC 60529(IP21)						