



TECHNICAL SPECIFICATIONS OF AVI SOLAR OFF GRID HYBRID UPS WITH CHARGE CONTROLLER

Model Name	SOHUC U0400 CC20 12V	SOHUC U0800 CC40-12V	SOHUC U1500 CC40 24V	SOHUC U3000 CC40 48V	SOHUC U6000 CC40 96V
Input Voltage (UPS)	180-260V	180-260V	180-260V	180-260V	180-260V
Input Voltage (INV)	90-280V	90-280V	90-280V	90-280V	90-280V
Output Voltages on mains mode	Same as input	Same as input	Same as input	Same as input	Same as input
Out Voltage on inVerter mode	220 +/- 5%	220 +/- 5%	220 +/- 5%	220 +/- 5%	220 +/- 5%
Output frequency on inVerter mode	50Hz +/- 0.1Hz	50Hz +/- 0.1Hz	50Hz +/- 0.1Hz	50Hz +/- 0.1Hz	50Hz +/- 0.1Hz
Output VA	320 VA	640 VA	1200 VA	2400 VA	4800 VA
Switching from mains to inVerter and inVerter to mains.	Automatic	Automatic	Automatic	Automatic	Automatic
Switching from mains to UPS and from UPS to Mains	Automatic	Automatic	Automatic	Automatic	Automatic
Output waVe form on mains mode.	Same as input	Same as input	Same as input	Same as input	Same as input
Output waVe form on inVerter mode.	Pure Sine WaVe	Pure Sine WaVe	Pure Sine WaVe	Pure Sine WaVe	Pure Sine WaVe
Technology	DSP Based Design	DSP Based Design	DSP Based Design	DSP Based Design	DSP Based Design
Efficiency during inVerter Mode	>80%	>80%	>80%	>80%	>80%
InVerter oVerload	120%	120%	120%	120%	120%
Auto reset feature on oVerload	Yes	Yes	Yes	Yes	Yes
InVerter short circuit	300%	300%	300%	300%	300%
Battery low Cutoff	10.5V	10.5V	21V	42V	84V
Auto reset feature on Battery low	Yes	Yes	Yes	Yes	Yes
Technology of charge controller	PWM Technology	PWM Technology	PWM Technology	PWM Technology	PWM Technology
Capacity of In built charge controller	20 Amps	40 Amps	40 Amps	40 Amps	40 Amps
Charger (Mains mode)	Power factor controlled boost Technology	Power factor controlled boost Technology	Power factor controlled boost Technology	Power factor controlled boost Technology	Power factor controlled boost Technology
Efficiency (Mains mode)	80%	80%	80%	80%	80%
Battery charging current	6 Amps	10 Amps	10 Amps	10 Amps	10 Amps
Battery Full Charge Cutoff	13.8 VDC	13.8 VDC	27.6 VDC	55.2 VDC	110.4 VDC
Specifications of Solar PV Module to be connected to AVI SOHUC					
Input Voltage from PV MODULE	Voc=21V , Vm=17V +/- 1V	Voc=21V , Vm=17V +/- 1V	Voc=42V , Vm=34V +/- 1V	Voc=84V , Vm=68V +/- 1V	Voc=168V , Vm=136V +/-1V
Output charging Voltage	Suitable for 12V Battery	Suitable for 12V Battery	Suitable for 24V Battery	Suitable for 48V Battery	Suitable for 96V Battery
PV module maximum wattage	300 watts	600 watts	1200 watts	2400 watts	4800 watts
Specifications of Battery to be connected to AVI SOHUC					
Battery VOLTAGE	12 V	12V	24V	48V	96V
No of batteries of 12V	1	1	2	4	8
or	OR	OR	OR	OR	OR
No of batteries of 2V	6	6	12	24	48
Battrey Ah minimum per Battery @ C20	=(PV MODULE WATT X 12)/18	=(PV MODULE WATT X 12)/18	=(PV MODULE WATT X 12)/36	=(PV MODULE WATT X 12)/72	=(PV MODULE WATT X 12)/144
OR	OR	OR	OR	OR	OR
Battery Ah minimum per Battery @ C10	=(PV MODULE WATT X 10)/18	=(PV MODULE WATT X 10)/18	=(PV MODULE WATT X 10)/36	=(PV MODULE WATT X 10)/72	=(PV MODULE WATT X 10)/144