

 **100%**  
Copper Coil

**SAMSUN**<sup>®</sup>  
SOLAR

# ALPHA

SERIES

PURE SINE WAVE UPS



Support  
Surge Load



LCD and LED  
Indication



Lightning  
Protection



Solar Compact  
Design



**5kVA/48V**

## ALPHA SERIES TECHNICAL SPECIFICATIONS

Connection Type	Single Phase
Inverter output power	5KVA/48V
Power Factor	0.8
Battery input voltage	12V DC- 48V DC (Various models)
Mains input voltage	230V AC, 50Hz
Mains input range	0V-270V, 45Hz to 65Hz
Mains high voltage withstand	Up to 440V
AC output (Inverter)	230V $\pm$ 3%, 50Hz
Battery full Cut-off	14.5V
Inverter output waveform	Pure sine wave (harmonic distortion less than 1%)
Inverter topology	Bridge type center aligned switching MOSFET based
Battery charging voltage	Intelligent 4 stage charger constant current/constant voltage SMPS charging with full charge cut off.
Charging current	Settable from 1A to 15A
Charging working range	120V-270V AC Mains input
Inverter high cut-off voltage	270v
Inverter low cut-off voltage	100v
UPS high cut-off voltage	265v
UPS low cut-off voltage	180v
Battery low warning	10.5v
Battery low cut-off	10V
Operating temperature	00C TO 55°C
Cooling fan auto-ON temp.	70°C
Cooling fan auto-OFF temp.	60°C
Storage temperature	-15°C TO 60°C
Humidity	5% to 95% Relative humidity (Non-condensing)
Inverter protection	Overload, short circuit, battery deep discharging

Specification	Inverter Mode	UPS Mode
Input voltage Range	100V - 270V $\pm$ 10V	180V - 265V $\pm$ 10V
Changeover time (Inverter to mains)	Approx $\leq$ 10msec	Approx $\leq$ 10msec
Changeover time (Mains to Inverter)	Approx $\leq$ 40msec	Approx $\leq$ 30msec