

# STC SERIES

3-5 kW 48Vdc

Double Conversion Online (VFI)



## Product

This is a multi-function UPS, combining functions of inverter and battery charger to offer uninterruptible power support with portable size. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC charger priority and acceptable input voltage based on different applications.

STC comes in nominal power rating of 3,000VA and 5,000VA. It is designed to provide conditioned power to microcomputers and other sensitive electronic equipment. When it is generated, alternating current is clean and stable. However, during transmission and distribution it may be subject to voltage sags, spikes and complete power failure that may interrupt computer operations, cause data loss and even damage equipment. The UPS protects equipment from these disturbances. The UPS is a compact, on-line UPS. An on-line UPS continuously conditions and regulates its output voltage, whether utility power is present or not. It supplies connected equipment with clean sine-wave power. Sensitive electronic equipment operates best from sine-wave power. For ease of use, the UPS features a LCD display to indicate all information for UPS, and provide kinds of function buttons.

## Automatic Restart

The UPS is programmed to restart automatically when the mains returns after switching off due to end of back-up time following prolonged power failure.

## Communication

STC Series comes with an expansion slot for optional communication board which make it compatible with the main communication option: SNMP and AS40

## Features

- True double-conversion
- Pure Sine-wave output
- Output Power Factor 1.0
- Configurable charging current via LCD setting
- Compatible with Generator
- Cold Start capability
- Overload and short circuit protection
- Very powerful AC charger at 60A
- Optional parallel operation up to 9 units for Single Phase and Three Phase application
- Common 48Vdc battery pack for the parallel system
- Full Bridge inverter design to support half-wave load and unbalance load

Model	STC 1103-00L	STC 1105-00L
Capacity	3000VA/3000W	5000VA/5000W
<b>Input</b>		
Voltage	220/230/240 VAC	
Voltage Range	110-280 VAC @ 50% load ; 176-280 VAC @ 100% load	
Frequency Range	46~54 Hz or 56~64 Hz	
Power Factor	$\geq 0.98$ @ Nominal Voltage (100% Load)	
THDi	$\leq 8\%$	
<b>Output</b>		
Output Voltage	220/230/240 VAC	
AC Voltage Regulation (Batt. Mode)	$\pm 1\%$	
Frequency Range (Synchronized Range)	46~54 Hz or 56~64 Hz	
Frequency Range (Batt. Mode)	50 Hz $\pm$ 0.1 Hz or 60Hz $\pm$ 0.1 Hz	
Current Crest Ratio	3:1	
Harmonic Distortion	$\leq 3\%$ THD (Linear Load), $\leq 5\%$ THD (Non-linear Load)	
Transfer Time	AC Mode to Batt. Mode	Zero
	Inverter to Bypass	4 ms (Typical)
Waveform	Pure Sinewave	
<b>Efficiency</b>		
Line Mode	93%	
ECO Mode	99.50%	
Battery Mode	91%	
<b>Battery</b>		
Battery Voltage	48 VDC	
Floating Charge Voltage	54.6 VDC	
Overcharge Protection	66 VDC	
Charging Current (Max)	60 A	
<b>Indicators</b>		
LCD Panel	Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator Via LCD	
<b>Physical</b>		
Dimension, D x W x H(mm)	450 x 190 x 336	
Net Weight (kgs)	15	15.5
Communication Interface	RS232 & USB	
<b>Operating Environment</b>		
Humidity	0 to 95% Relative Humidity(Non-condensing)	
Operating Temperature	0°C to 50°C	
Storage Temperature	-15°C to 60°C	