



## Source Transfer Switch STS 220 series

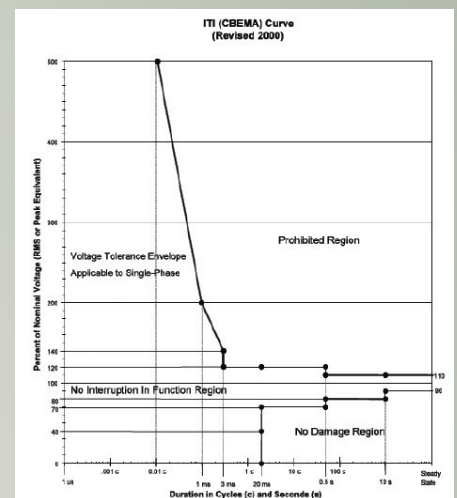
SmartPower Source Transfer Switch (STS), also known as the Redundant switch or Automatic Transfer Switch (ATS), is a high availability switch that has two input power sources for each AC line, which provide a redundancy electrical power for equipment. The power source of STS can be from the same or different source of transformers. The STS is designed to supply an electric power for equipments from a primary source and once the primary source is outage, then the STS will automatically transfer an output power supply to the secondary source. The transfer time during the power source transferred is limited at 8-12 ms, which is lower than the standard for the safety range, the power source switching is seamlessly to IT equipment. Per the ITI Curve, typical power supplies will operate 20ms after AC voltage drops to zero, and the switching occurs safely between the two input sources regardless of any phase differences. The STS unit have provided network connectivity (as optional), which allows for remote management through Web, SNMP or Telnet interfaces. Or local connectivity via RS485 for MODBUS protocol.

### Robust & Reliability out-of-phase switching

SmartPower STS is designed to provide redundancy as close as possible to the equipment, The STS deploys a "Break Before Make" technology based on relays to prevent relay welding and also double protection from any incident error with glass tube fuses, so there is no cross-connection of sources, regardless of the phase between sources. In an event of a short-circuit, the STS ensures that the fault could not affect an alternative source, therefore you can ensure to have a fault-free power source.

### Features:

- Seamless power transfer to IT equipment per the ITI Curve.
- User friendly with LCD & LED display with buzzer alarm.
- True RMS Voltage, Load Current and Watt display.
- Input & Output LED status & fault indicator.
- Automatic transfer to the secondary source while the primary source power outage.
- Power source transferable by manually are available.
- Event log with real time clock stamp.
- Audible alarm & fault indicator during Phase fault detection, Sources voltage abnormal.
- Audible alarm during transfer to backup source.
- Primary source selectable.
- User friendly setup via LCD panel or SNMP web interface;
  - +Setup an input voltage range: +/- 5,10,15,20,25%
  - +Setup Automatic recovery or Manually transfer while primary source recover to normal.
  - +Setup Automatic recovery time delay: 5,15,30,45,60 seconds after primary source recover to normal
  - +Setup System Time and Setup Load Alarm Level in percentage (>70,>80,>90, or >100%)
- Input source cross-connection protection by "Break Before Make" and from any incident error with glass tube fuses.
- Short circuit protection with thermal circuit breaker.
- Slim size designed, only 1U for rack 19"

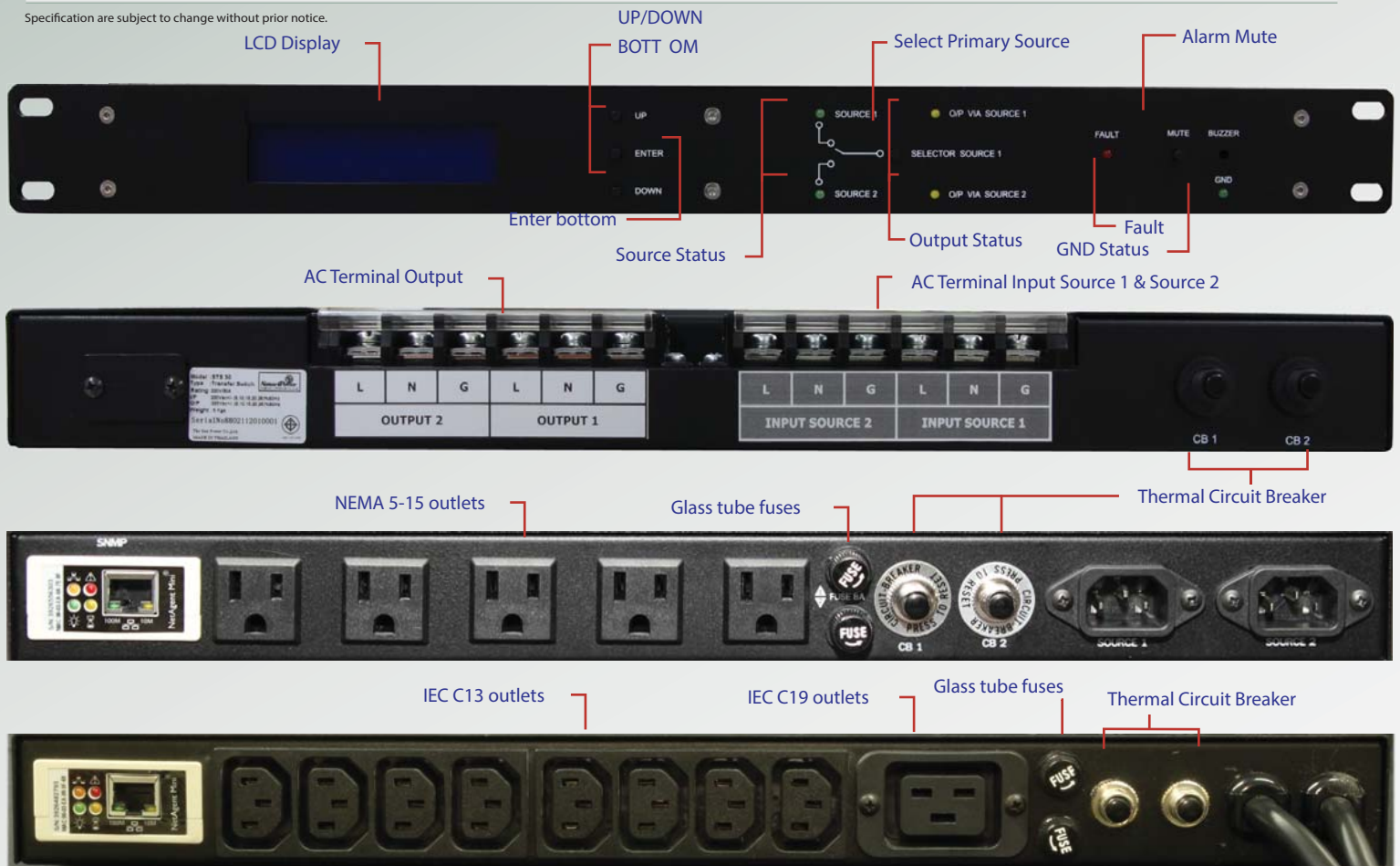


**Source Transfer Switch  
STS 220 series  
Technical specifications**



Model	STS 16	STS 30
Rating Current	16 Amp	30 Amp
Input Voltage Range	220VAC (+/- 5,10,15,20,25% selectable) 50 Hz. 1 Phase with Ground	
Auto Recovery Time	5,15,30,45 or 60 seconds selectable	
Protection	Thermal circuit breaker for short circuit, over current protection Input source cross-connection protection with break before make and glass tube fuse	
Transfer Time	Typical 8-12 ms. (*Less transfer time to be requested as optional)	
Input/Output Plug Type	NEMA 5-15 or IEC C13/C19/C20 or Universal Outlet or Terminal block or Power plug receptacle 2P+E (IEC309)	
Indicator	LCD & LED indicator: True RMS voltage, Current and Watt display, Fault error, Input & Output power status, Event log, Utility Source available, Load Level(%), etc.	
Audible Alarm	Over load, Transfer to backup source, Input phase fault, Communication fault	
Operating Temperature	0 - 45 Celsius	
Relative Humidity	0 - 95% non-condensing	
Noise	< 35 dBA at 1m	
Management (Option)	SNMP card, RS232 or RS485 (ModBus Protocol)	
Complied Standard	ISO9001, EN50091-1, EN50022/B, IEC1000-4, IP20	
Dimension WxDxH	430x250x45 mm	
Weight	3 kg.	3.1 kg.

Specification are subject to change without prior notice.



Input/Output Power Plug Receptacle 2P+E  
STS 16: Power Cord Length 5m 16A  
STS 30: Power Cord Length 5m 32A



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