iSTS 19" Rack Mounted

STATIC POWER
SMART | SOLID | SAFE

With a MTBF in excess of 800,000 hours, Static Power's 19" rack iSTS are dedicated to applications requiring a high level of reliability.

All iSTS B models have an integrated maintenance bypass with hot socket field replaceable power module facilitating maintenance and reducing Time To Repair – MTTR – to a minimum.
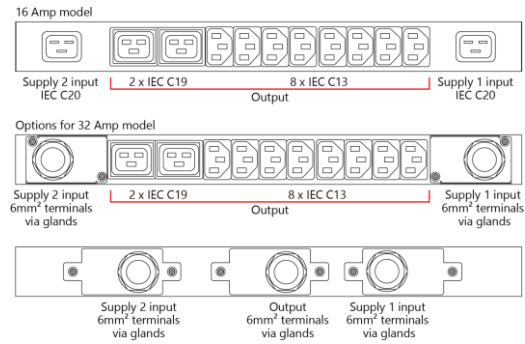
The true solid state iSTS A1 with its multiple inputs/output configurations replace advantageously inferior relay or hybrid ATS.

All our 19"rack iSTS are adaptable to particular applications or requirements.

Key features:

- True solid state, Break-Before-Make transfer
- Transfer time: <1ms to ¼ cycle
- MTBF > 800,000h
- Hot socket replaceable power module*
- Maintenance bypass*
- Incoming source isolators
- HTTP, SNMP, MODBUS TCP, email and NTP**

*Except iSTS A1   **iSTS A1 optional*

16 Amp model
Supply 2 input IEC C20 | 2 x IEC C19 | Output 8 x IEC C13 | Supply 1 input IEC C20

Options for 32 Amp model
Supply 2 input 6mm² terminals via glands | 2 x IEC C19 | Output 8 x IEC C13 | Supply 1 input 6mm² terminals via glands

Supply 2 input 6mm² terminals via glands | Output 6mm² terminals via glands | Supply 1 input 6mm² terminals via glands

iSTS A1 – Inputs/Output configurations

iSTS A1

1RU/19"	
50/60Hz	
1kA	
LAN	
By Pass	
Hot Socket	
1 Ph	**32A**
3 Ph	

iSTS B1

1RU/19"	
50/60Hz	
2kA	
LAN	
By Pass	
Hot Socket	
1 Ph	**32A**
3 Ph	

iSTS B2

2RU/19"	
50/60Hz	
2kA	
LAN	
By Pass	
Hot Socket	
1 Ph	**125A**
3 Ph	**63A**

iSTS B4

4RU/19"	
50/60Hz	
5kA	
LAN	
By Pass	
Hot Socket	
1 Ph	**250A**
3 Ph	**160A**

	iSTS A1	iSTS B1	iSTS B2	iSTS B4
Current rating	16A and 32A		1Ph: 125A max 3Ph: 63A max	1Ph: 250A max 3Ph: 160A max
Voltage rating	115V or 230V, ±15%	All region-specific voltages selectable ±10%		
Type	1-Phase/2-Pole		1-Phase/2-Pole, 3-Phase/3-Pole or 3-Phase/4-Pole	
Frequency	50Hz and 60Hz, ±10% - Auto detection			
Transfer type	Break-Before-Make zero current transfer by Thyristors / SCR			
Synchronous break time	<1ms - asynchronous break time up to ¼ cycle			
MTBF	>1,000,000 hours	>800,000 hours		
Maintenance bypass	None	Cradle with 3-position overlapping, no-break CAM switch		
Isolation	Optional incoming source isolator switches, front mounted	Incoming sources isolator switches		
Display	Bi-colour LED mimic decal with load indication	Bi-colour LED mimic decal with graphic OLED display and information interface		
Interface	Preferred supply selection, Source transfer selection and Alarm cancel button			
Contact	One voltage free general alarm indicator, Form A or Form B - SPST	2 Self wetting transfer control inputs 5 Voltage free change-over status indicators, Form C		
Ethernet	LAN optional	HTTP, SNMP, MODBUS TCP, Email & NTP		
Input options	16A: IEC C20 sockets 32A: 6mm² terminals with glands	Fixed wiring to terminals up to 6mm² cables via glands	Fixed wiring to terminals up to 16mm² cables via glands	Fixed wiring to terminals up to 70mm² cables via glands
Output options	16A: 2 x IEC C19 + 8 x IEC C13 sockets 32A: 2 x IEC C19 + 8 x IEC C13 sockets or 6mm² terminals with glands	Fixed wiring to terminals up to 6mm² cables via glands	Fixed wiring to terminals up to 16mm² cables via glands	Fixed wiring to terminals up to 70mm² cables via glands
Dimensions H x W x D	16A: 1RU/19" - 44 x 483 x 285mm 32A: 1RU/19" - 44 x 483 x 307mm	1RU/19" - 44 x 483 x 510mm	2RU/19" - 88 x 483 x 460mm	4RU/19" - 177 x 483 x 650mm
Weight	5kg	11kg	16kg	38kg
Temperature	0 – 40°C	0 – 45°C		
IP rating	IP31			
Detection	Digital: <1ms			
Asynchronous break time	0ms, 10ms, 50ms or Vt proportional, 0° to 180°			
Loading	0 - 100% @40°C ambient	0 - 100% @45°C ambient		
Device ratings	80A$_{RMS}$, 1400V 1kA for 1 cycle	150A$_{RMS}$, 1400V 2kA 1 cycle	134A$_{RMS}$, 1600V 2kA 1 cycle	250/300A$_{RMS}$, 1400V 3.5kA/5kA 1 cycle
Overload @40°C ambient	40A for 30s 63A for 1s 115A for 0.1s	63A for 30s 100A for 1s 225A for 0.1s	125A for 30s 140A for 1s 250A for 0.1s	125% for 10min, 150% for 30s 200% for 1s, 300% for 0.1s 5kA for 1 cycle
Fault current setting	300% peak with load fault transfer inhibit	>350% peak with load fault transfer inhibit		
Safe install environment	20kA, 100A internally fused		20kA, 100A/200A internally fused	20kA, 300A internally fused
Protection	100A fuses - BS88/FE100		100A/200A fuses - BS88/FE100	300A fuses – aR-NGT00
Power factor	No practical limit			
Max THDV	10% - Max allowable source voltage distortion			
Crest factor	3 : 1	3.5 : 1		
dV/dt max	800V/µs			
Cooling	Passive		Redundant fans	
Humidity @40°C ambient	5 – 95% non-condensing			
Regulatory approvals	IEC 62310-1,2,3 - IEC 60950 - IEC 61000-6-1,2,3,4 – CE – RCM - UL Capable - RoHS			
Standard warranty	24 months offsite repair or replacement policy			

Specifications are subject to change without notice