

ATS

Two AC inputs - one AC output | Automatic transfer switch

ATS Model
500-2000
15 A 1800 VA 120 V
500-4000
20 A 2400 VA 120 V
500-6000
30 A 3600 VA 120 V

Automatic transfer switches

The ATS-500 series of automatic transfer switches is designed for applications where two or more autonomous power sources are available. The ATS can be utilized as single or multiple units for different levels of redundancy and was designed to be a cost-effective alternative to the ATS-1000.

Typical ATS applications

Applications include industrial control, automatic test equipment, oil exploration and utilities. For customers with unique needs, TSi Power offers custom programming to address your unique requirements.

How the ATS works

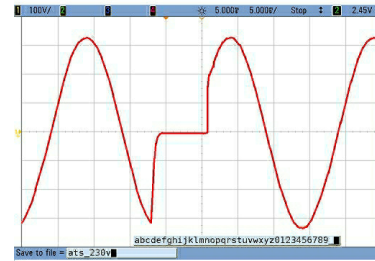
The ATS works with asynchronous or out-of-phase power sources which allows them to be used with a number of different sources. The ATS is fed by two AC power sources. When the primary power source detector circuit senses a loss of power on that circuit, it immediately switches the load over to the backup source in less than eight milliseconds (ms). Upon return of primary power, the ATS will switch back in less than 8 ms.



Front view showing enable/disable audible alarm switch and LED status indicators



Rear view showing compartment covers, DB-9 connector, primary and backup circuit breakers



Transfer between primary and backup power

This is fast enough to be invisible to even the most sensitive equipment.



Features and Benefits



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- Accepts inputs from asynchronous sources and can be used with most supply voltages, including out-of-phase.
- Eight ms transfer time between sources is fast enough for even the most sensitive loads.
- Audible alarm with enable/ disable switch provides for unattended security.
- LED status indicators for quick visual displays of fault conditions.
- Higher than 99% efficiency means substantial energy savings (when the ATS is used as a battery-less UPS).
- Remote monitoring is provided through DB9 port.
- 70-90% reduction in both CAP-EX and OP-EX (when the ATS is used as a battery-less UPS).
- Built-in primary and backup rocker style circuit breakers are highly visible and easily accessible on rear of unit.
- The ATS allows redundant AC power to mission-critical equipment using any combination of UPS, backup generator or other available autonomous AC power sources.
- Sturdy steel enclosure can be rack, wall or floor mounted with optional mounting brackets.

2 | **Specifications**
 ATS - 500 - Hardwire, 120 V - 15, 20, 30 A

SPECIFICATION	ATS-500-2000	ATS-500-4000	ATS-500-6000
ELECTRICAL			
VA at 120 V:	1800	2400	3600
Circuit breaker ratings	15 A	20 A	30 A
Switching technology	Mechanical relays		
INPUT			
Voltage / Current / Voltage range	120 V / 15, 20, 30 A / 96 - 136 V		
Frequency range	47 to 63 Hz \pm 5%, Caution: Both sources must use same nominal frequency		
Transfer time	8 ms		
Input / output wire size	14 AWG (2.08 mm ²)	12 AWG (3.3 mm ²)	10 AWG (5.26 mm ²)
AC input and output connections	Hardwire terminals (standard Hardwired units must be installed by a qualified electrician)		
OUTPUT			
Voltage / Current	120 V / 15, 20, 30 A		
Load regulation	1 % from no load to full load		
Power efficiency	99% or higher		
AC distribution	Hardwire terminals (standard Hardwired units must be installed by a qualified electrician)		
LED indicators: Green / Yellow / Red	Primary output / Backup output / No primary or backup AC		
Audible alarm	Buzzer beeps when loss of primary or backup AC occurs		
Audible alarm on / off	Enable / Disable switch		
Alarm contacts	Rear-mounted DB-9 connector sends loss of primary / backup AC		
PHYSICAL			
Dimensions: Inches / mm	W: 11.25" / 286 mm H: 3" / 76 mm D: 11.5" / 292 mm		
Weight: lbs / kg	8 lbs / 3.63 kg		
Front mount kit for rack: 19"	MK-4019A		
Center mount kit for rack: 19"	MK-4019B		
Wall or floor mount kit	MK-4000C		
ENVIRONMENTAL			
Ambient temperature	0° to 40° C / 32° to 104° F		
AGENCY APPROVALS			
Safety	UL 60950-1 Issue: 2007/03/27 Ed:2 UL Standard for Safety Information Technology Equipment - Safety - Part 1: General Requirements - CSA C22.2#60950-1 Issued: 2007/03/01 Ed:2 Information Technology Equipment Safety Part 1: General Requirements		
WARRANTY			
Warranty	Two year limited warranty covers parts and labor		

TSi Power's ongoing product improvement process makes specifications subject to change. Other companies product names herein are for identification purposes only and may be trademarks of their respective companies.



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ATS system architecture

