

1000-380x

1000-580x

1000-780x

1000-300x

220, 240 V

1000-500x

220, 240 V

1000-700x

220, 240 V

15 A

208 V

20 A

208 V

30 A 208 V

15 A

20 A

A30 A

Two AC inputs - one AC output

Automatic transfer switch

## Automatic transfer switches

The ATS-1000 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.

## Typical ATS applications

Applications include but are not limited to telecom, computers, data centers, industrial control, automatic test equipment, oil exploration and utilities.

## 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. Customers with special requirements can be offered custom programming to address special use situations.

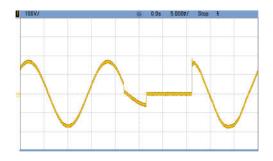
The ATS is fed by two AC power sources. When the primary power source detector circuit senses a loss of power on that circuit, it immediately switches the load over to the backup power source in under one cycle. This is



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



Rear view of Model -5x03 with two L6-20P Plugs and one L6-20R Receptacle



Typical transfer between primary and backup power

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



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## **Features and Benefits**

- Accepts inputs from asynchronous sources
  and can be used with most supply voltages, including out-of-phase.
- Transfer time of under one cycle between sources which 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 & enable function (unit ON/OFF) is provided through a DB9 port.
   AC Inputs are galvanically isolated.

- 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 'flat-on' 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.
- RCD (Residual Current Device) compatible.

SPECIFICATION	ATS-1000-380>	<pre> ATS-1000-580x</pre>	ATS-1000-780x	ATS-1000-300x	ATS-1000-500x	ATS-1000-700
ELECTRICAL						
VA at 208 V	3120	4160	6240			
VA at 220 V				3300	4400	6600
VA at 240 V				3600	4800	7200
Current rating	15 A	20 A	30 A	15 A	20 A	30 A
Switching technology			Mechani	cal relays		
NPUT				oarroiayo		
Voltage range: 208 V	208 V; 166 - 239 V ± 2.5 % nominal					
	220 V or 240 V; 184 - 264 V ± 2.5 % nomin					
Voltage range: 220 V or 240 V						
Frequency range	47 to 63 Hz, Caution: Both sources must use same nominal frequency					
Transfer time	Under one cycle					
Plug models: -3x02 / -3x03 / -3x04	6-15P / L6-15P / LEC 60320 C14					
Plug models: -5x02 / -5x03 / -5x04 Plug models: -7x02 / -7x03	6-20P / L6-20P / IEC 60320 C20 6-30P / L6-30P					
Plug models: -xxxx	Other configurations available					
DUTPUT			Outor oornigan			
Voltage / Current		208 1/ / 15 20 30		220 \	//2/0V/15 20	30.4
-	208 V / 15, 20, 30 A 220 V / 240 V / 15, 20, 30 A					30 A
Load regulation	1 % from no load to full load					
Power efficiency	99 % or higher					
Receptacle models: -3x02 / -3x03 / -3x04	6-15R / L6-15R / LEC 60320 C13					
Receptacle models: -5x02 / -5x03 / -5x04 Receptacle models: -7x02 / -7x03	6-20R / L6-20R / IEC 60320 C19 6-30R / L6-30R					
Recdeptacle models: -xxxx	Other configurations available					
LED indicators:	Green: Primary output, Yellow: Backup output, Red: 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		near mounted	DD 9 connector 3		ary / backup AO	
Dimensions: Inches / mm	I	\\/: 16" /	406 mm H: 2.25"	/ 92 mm D: 12"	/ 205 mm	
Weight: lbs / kg	W: 16" / 406 mm H: 3.25" / 83 mm D: 12" / 305 mm 12 lbs / 5.45 kg					
Front mount kit for rack: 19" / 23" / 24" /	°					
482.6 / 584.2 / 609.6 mm	MK-5019A / MK-5023A / MK-5024A					
Center mount kit for rack: 19" / 23" / 24" /	MK-5019F / MK-5023F / MK-5024F					
482.6 / 584.2 / 609.6 mm						
Wall or floor mount kit	MK-5000C					
ENVIRONMENTAL	_	·				
Ambient temperature			32° to 104° F	/ 0° to 40° C		
AGENCY APPROVALS	•					
Safety	UL 60950-1	lssue: 2007/03/2	7 Ed:2 UL Standar	rd for Safety Inform	mation Technoloc	v Equipment -
	Safety - Part 1: General Requirements - CSA C22.2#60950-1 Issued: 2007/03/01 Ed:2 Inform					
	Technology Equipment Safety Part 1: General Requirements					
WARRANTY						
Warranty	Two year limited warranty covers parts and labor					
	TSi Power's or	ngoing product improve	ement process makes s rposes only and may be	pecifications subject to	o change. Other comp	anies product
	names herein a				espective companies.	
		AL	S system are	cnitecture		
Intertek		Primary AC Circuit Breake	er I	]	Primary Relay	
		L1				ATS Output
	ility AC ary Input	L2/NEUT		Power Supply		<u> </u>
1103 W Pierce Avenue		d ò				O L1
Antigo, WI 54409 USA	Grour	nd	]	Logic = = =	=======	
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Utility AC Backup Input

Ground

L2 / NEUT

Backup AC Circuit Breaker Alarm

DB-9 Alarm

Ground

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Backup Relay

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