



# Transfer Switch

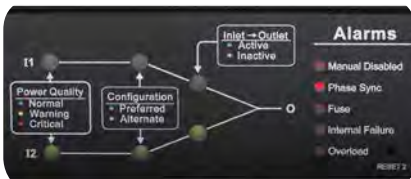
## Intelligent Rack Transfer Switch

Raritan’s hybrid rack transfer switches use electromechanical relays and silicon-controlled rectifiers (SCRs) to transfer a load between two sources. The result is performance and reliability that exceeds that of standard automatic transfer switches (ATS) and at a lower price point than static transfer switches (STS).



### Break-Before-Make

Built-in sensors ensure break-before-make power transfer from one power source to another within 4 to 8ms.



### Out-of-Phase Transfers

Uses two single throw relays instead of one double throw relay (a single point of failure) to support reliable transfers regardless of power phase.

## Features and Benefits

- Fast transfer: Load transfer times 4 - 8ms
- Reliable transfer between sources regardless of phase
- Over-sized relays (rated 48A) and SCRs (rated 70A)
- Eliminates electrical arcing that leads to transfer relay failure
- 3.3mm vs. typical 0.6mm air gap to prevent arcing due to surges
- Inlet surge protection and field replaceable, fast-blow fuses for short circuit protection
- Threshold alerting and status updates via GSM text, email and syslog, SNMP V1/2 and 3
- Logs transfer times for reporting
- Support for up to 32 plug-and-play sensors
- USB support i.e. Wi-Fi, camera, tablet, and cascading

## Raritan’s innovative rack transfer switch designed for performance and reliability

Raritan offers the first hybrid rack transfer switch combining electromechanical relays and silicon-controlled rectifiers (SCRs) for exceptional performance and reliability. SCRs provide fast power transfer times at 4 to 8ms, ensuring that your equipment continues to operate when power fails or fluctuates. This pioneering rack transfer switch offers inlet surge protection, field replaceable output short circuit protection, redundant internal power supplies and dual controllers.

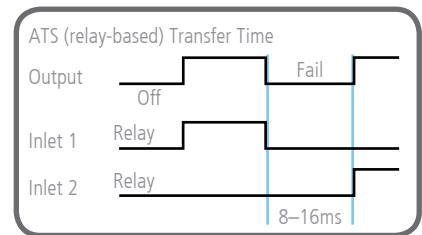
Transfer Switch Models	Chassis	Input Voltage	Plug Type	Output Voltage	Outlet Type (QTY)	Current	Circuit Breaker (QTY)	10/100 Ethernet
PX3TS-1875CR	1U	200-240	(2) IEC C-20 16A	200-240	8 x C13 1 x C19	16	0	Yes
PX3TS-1875R	1U	200-240	(2) IEC 60309 16 A	200-240	8 x C13 1 x C19	16	0	Yes
PX3TS-1469R	2U	200-240	(2) IEC 60309 32 A	200-240	16 x C13 4 x C19	32	2 x 16A 1-Pole	Yes

<b>Certifications</b>	Certifications include FCC Part 15, A; SAA, CE, EAC, RoHS/WEEE compliant.
<b>Warranty</b>	Two years. In addition Raritan offers two years extended warranty.

### Raritan's Innovative Hybrid Design

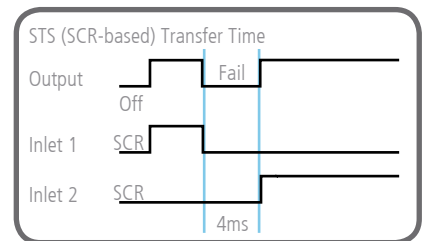
#### Electromechanical Relay Switches (ATS):

- Vendors' transfer times vary from 8 to 16ms.
- The contacts often weld together due to electrical arcing; one of the leading causes of electromechanical relay transfer switch failure.
- Relay only solutions do not indicate when the relay has welded and is therefore no longer able to switch power feeds. Thus data center operators only know their transfer switch has failed when it's too late, i.e. there is a power failure and no switchover occurs.



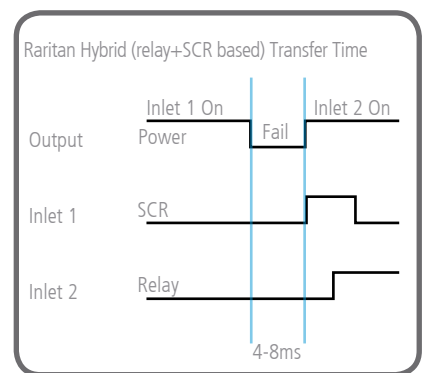
#### Silicon-Controlled Rectifier Switches (STS):

- Offer very fast transfer times (normally 4 to 6ms), but are over five and a half times more expensive than electromechanical switches.
- Draw significantly more energy than electromechanical relays and produce more heat thereby consuming cooling resources.
- Are less energy efficient requiring forced cooling and lower maximum operating temperatures.
- Reduce the energy efficiency of the rack.



#### Raritan's Patent-Pending Hybrid Design

- Solid state components provide speedy transfer.
- Patent-pending circuitry reduces wear on electro-mechanical components.
- Eliminates electrical arcing that leads to transfer relay failure.
- Identifies output short circuits and sends an alarm so the short circuit may be corrected before the power transfer is made.
- Speed of an STS at a lower cost.
- Fan-free design for increased reliability.



### Endorser of the EU Code of Conduct on Data Centre Energy Efficiency

Formulated by the EU's Joint Research Centre, the Code is a measured response to the energy challenges the EU faces. It's aim is to encourage companies with data centers to reduce energy consumption while ensuring business objectives continue to be met.

As an endorser, Raritan have pledged to implement the Code's ethos through devising products and services that help organizations to bring their data centers into line with its best practice recommendations.

Call +31 (0)10 284 4040 or visit [www.raritan.eu](http://www.raritan.eu)

Raritan is a proven innovator of power management solutions, DCIM software, and KVM-over-IP for data centers of all sizes. Based in Somerset, NJ, Raritan has a global presence across 38 offices, serving 76 countries and 50,000 locations worldwide. Raritan's award-winning hardware and software solutions increase energy efficiency, improve reliability, and raise productivity. For more information, please visit [www.raritan.eu](http://www.raritan.eu) or call +31 (0)10 284 4040.

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