



IT SWITCH

Seamless power transfer for reliable architectures
from 16 to 20 A single-phase

Electronic transfer
systems



The solution for

- > Data centres
- > Processes
- > Telecommunications
- > Air traffic control

Our dedicated Expert Services for STS

We offer services to ensure your STS highest availability:

- > Commissioning
- > On-site intervention
- > Preventive maintenance visits
- > 24-hour call out and rapid on-site repairs
- > Maintenance packages
- > Training



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Continuity of service for critical applications

- Located as close as possible to the application, the IT SWITCH allows a highly accessible architecture.
- It protects against:
 - main power source outage,
 - spurious tripping of upstream protection,
 - the result of mutual interference caused by faults in the applications (e.g.: short-circuit) being supplied from the same source.

A secure power supply adapted to your equipment

- IT SWITCH has been designed to be easily installed near sensitive applications, to fit into 19" racks.
- Different versions: fixed or swappable to meet all your power availability requirements.

Easy site operation

- Easy changing of the preferred supply path without modifying the cabling.
- Switching from one path to another, carried out by the operator and secured by the IT SWITCH automatic controls and protections.
- Easily adapts to match site specificity via standard or customised operating settings.

User-friendly operation

- IT SWITCH is fitted with a control panel that is easy to operate and guarantees safe operation.
- The communication software allows easy operation of the different equipment on-site.

Operating principle

IT SWITCH is an automatic transfer system between two sources. It is digitally controlled by microcontrollers to transfer the loads instantly, without disruption and without overlapping the sources.

Automatic transfer

The detection of a failure in the preferred source triggers the automatic and instantaneous transfer to the alternate source without disturbing the supply to the load. The "break before make" transfer is carried out without overlapping in order to prevent interference between the sources.

Manual control

The IT SWITCH manual control allows the operator to transfer the loads securely to one of the sources in order to carry out maintenance operations.

Choosing the preferred source

The operator chooses a preferred source for each IT SWITCH.

The parameters of each source and of the supply to the loads are permanently monitored.

Separating loads

The system inhibits the transfer in the event of a fault in the equipment supplied downstream. This discrimination avoids the faulty current being transferred onto the other source so as not to disturb other users.

"Hot Swap" power units

The extractable version of the IT SWITCH HA increases system availability. The hot swappable plug-in unit means the control and power unit can be taken out without interrupting the supply to the applications.

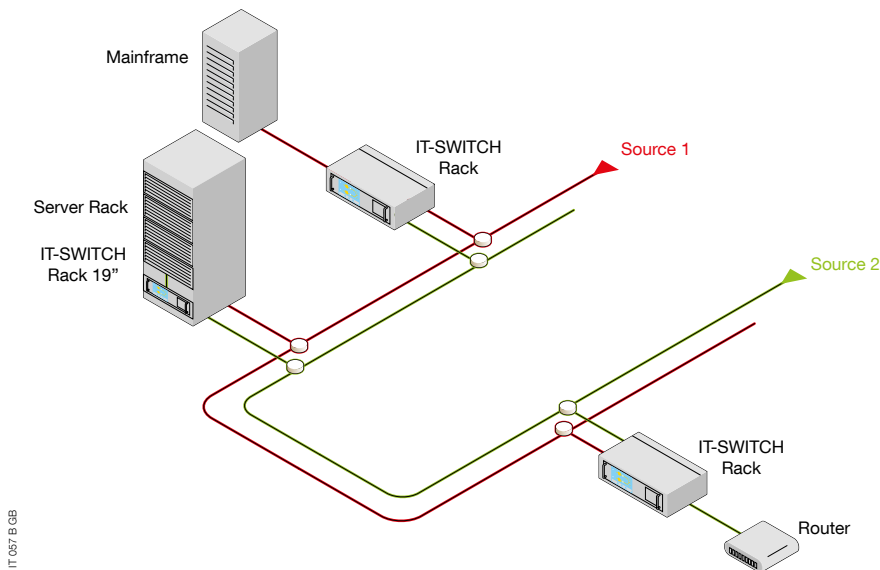
The fixed chassis is equipped with a double maintenance bypass, which guarantees simple and totally secure operation.

Installation and operation

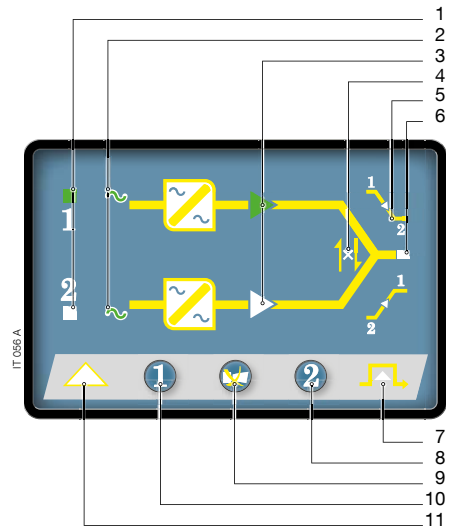
IT SWITCH HA (High Availability) is especially suited to sensitive applications thanks to its advanced transfer parameter controls: source synchronisation, power quality adaptation, operating modes and downstream fault current.

IT-SWITCH HA-E swappable version (High Availability) offers an additional "hot swap" function which enables users to perform maintenance procedures without shutting down the loads.

Distributed redundancy



Command and control mimic panel



1. Preferred source (1 or 2)
2. Input voltage source 1 or 2 within tolerances
3. Load on source 1 or 2
4. Transfer not possible
5. Transfer blocked
6. Imminent stop
7. Maintenance bypass on (hot swap version)
8. Manual transfer to source 2
9. Alarm reset & preferred source selection
10. Manual transfer to source 1
11. General alarm

Technical data

IT SWITCH			
Model	HA 19" rack	HA-E 19" extractable rack	
ELECTRICAL SPECIFICATIONS			
Rated current	16 A	16 A	20 A
Rated voltage	single-phase 100/120/220/230/240 V		
Input voltage tolerance	adjustable (factory setting $\pm 15\%$)		
Rated frequency	50 or 60 Hz		
Frequency tolerance	$\pm 10\%$ adjustable		
Short-circuit current	20/15 In ⁽¹⁾		
Crest factor	up to 4		
MAINTENANCE BYPASS			
Changeover switch	bipolar (phase/neutral)		
Transfer mode	synchronous/asynchronous "break before make"		
CONNECTIONS			
Input and output on terminal blocks	-		•
Input and output on IEC 16 A sockets	•	•	-
ENVIRONMENT			
Operating ambient temperature	0 to 40 °C		
Cooling	Natural		
MECHANICAL SPECIFICATIONS			
Dimensions W x D x H	446 ⁽²⁾ x 310 x 131 mm	449 ⁽²⁾ x 400 x 133 mm	
Weight	8.5 kg	14 kg	
Degree of protection	IP21		

1) Depending on model. - (2) 484 mm with front fixing squares (19" rack integrable)

Standard transfer features

- Preferred source selection.
- Automatic transfer.
- Manual transfer.
- Changeover without source overlap.
- Synchronized and non-synchronized source management (fully adaptable modes).
- Transfer lock on downstream fault.
- Configurable synchronisation tolerance.
- Lock on repetitive transfers automatic restart setting.
- Automatic restart configurability.

Standard mechanical features

- 19" rack.

Standard communication features

- Command and control mimic panel.
- Dry-contact interface.
- MODBUS RTU (only RS485 serial port).

Maintenance

- "Hot swap" pull out module (model HA-E).
- Maintenance Bypass (model HA-E).