Electronic transfer IT SWITCH systems from 16 to 40 A single-phase a secure power supply close to your applications

Continuity of service for critical applications

- · Located as close as possible to the application, the IT SWITCH allows for 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 being (e.g.: short circuit) 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, under raised floors and in suspended ceilings.
- Different versions: Standard or High Availability, fixed or swappable to meet all your power 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 control.

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.

Experience

• IT SWITCH benefits from the experience gained with LTM (Load Transfer Modules, from 30 to 4800 A) which have guaranteed since 1988 the availability of power supplies to countless applications



Your protection

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



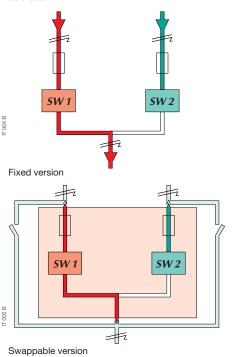




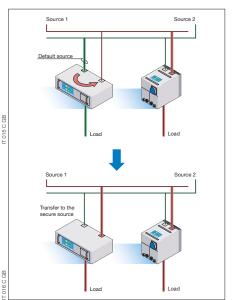


Operating principle

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.



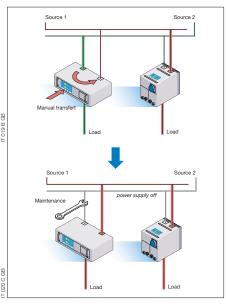
Automatic transfer



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.

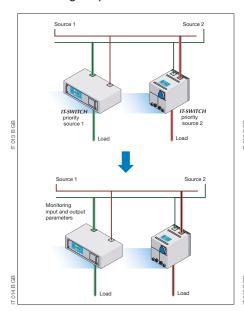
The "break before make" transfer is carried out without overlapping in order to prevent interference between the sources.

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.

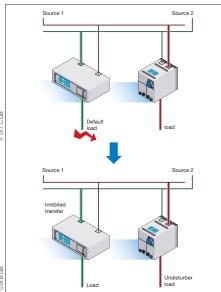
Choosing the preferred source



The operator chooses a preferred source for each *IT SWITCH*.

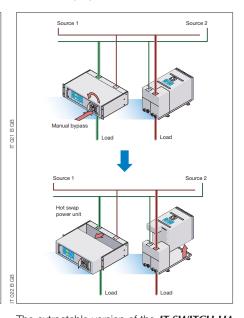
The parameters of each source and of the supply to the loads are permanently monitored.

Separating loads



The output current control of the *IT SWITCH HA* 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, it guarantees simple and totally secure operation.



One version to suit each requirement

IT SWITCH S (standard) controls the automatic or manual transfer from the preferred source to the back-up source.

IT SWITCH HA (High Availability) is especially suited to sensitive applications thanks to its advanced transfer parameter controls: source synchronisation 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.

	IT SWITCH S Standard	<i>IT SWITCH HA</i> High Availability	IT SWITCH HA-E swappable
INTEGRATION	Model S	Model B	Model E
INTEGRATION			_
19" Rack	•	•	•
Box	•	•	•
TRANSFER			
Preferred source selection	•	•	•
Automatic transfer	•	•	•
Manual transfer	•	•	•
Changeover without source overlap	•	•	•
Synchronous and asynchronous changeover	•	•	•
Synchronous changeover only		•	•
Transfer lock on downstream fault		•	•
Lock on repetitive transfers		•	•
REMOTE MANAGEMENT			
Command and control mimic panel	•	•	•
Dry contacts for information transfer	•	•	•
RS 485 JBUS serial port		•	•
Data log	•	•	•
CONNECTIONS AVAILABLE			
IT SWITCH 19" rack - 16 A			
Input and output on terminal blocks			•
Input and output on IEC 16A sockets	•	•	•
IT SWITCH 19" rack - 20 A			
Input and output on terminal blocks			•
IT SWITCH box - 32 A			-
Input and output on terminal blocks	•	•	•
Input on terminal blocks and output on 32 A socket	•	•	
IT SWITCH box - 40 A			
Input and output on terminal blocks	•	•	•
MAINTENANCE			
"Hot swap" pull out module			•
Maintenance Bypass			•

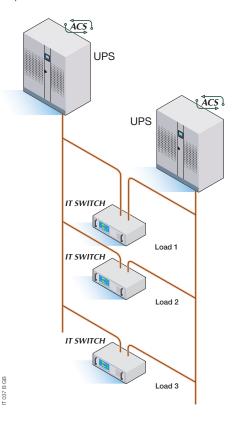
Optimising transfer conditions



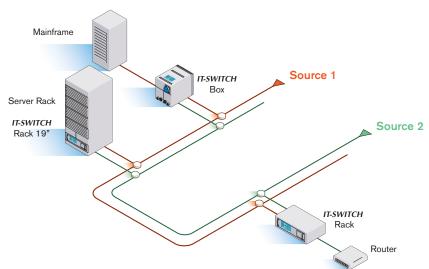
The *ACS* (Automatic Cross Synchronisation) integrated to the UPS, synchronises the output with another source or independent UPS unit when there is no bypass network input (battery operation).

It allows the *IT SWITCH* to transfer simultaneously and guarantees operation with no single point of failure.

Purpose of the *IT SWITCH* is to protect the load and to increase the availability of critical load supply. Its smart algorithm for switching monitors the two input sources. Their synchronisation via *ACS* permits the optimization of the transfer.



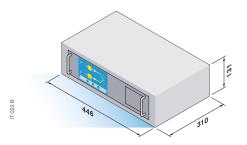
Distributed redundancy



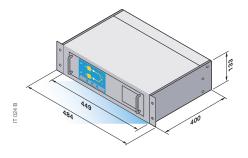


Dimensions

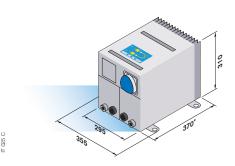
• IT SWITCH 19" rack Rating 16 A - Weight 8.5 kg



• IT SWITCH extractable 19" rack Ratings 16 A and 20 A - Weight 14 kg

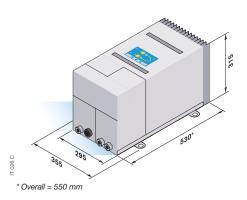


• IT SWITCH box Ratings 32 A and 40 A - Weight 20 kg

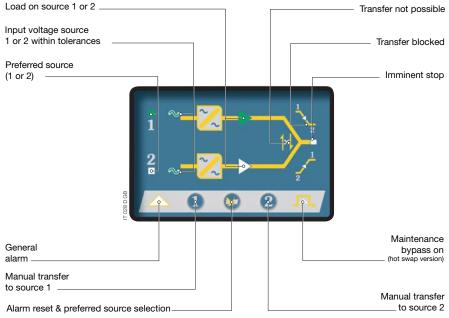


*32 A with output socket = 520 mm *40 A overall = 390 mm

• IT SWITCH extractable box Ratings 32 A and 40 A - Weight 28 kg



Command and control mimic panel



Integrated control panel in a floor box

IT SWITCH box can be installed under a raised floor and managed from a control panel integrated in a floor box.



Communication option

• TOP VISION software for monitoring through Windows™ [Info. p. 95].

Technical data

ELECTRICAL SPECIFICATIONS

Ratings	rack model 16 A - 20 A - box model 32 A - 40 A
Voltage	single-phase 100/120/220/230/240 V
Input voltage tolerance	adjustable (factory setting ± 15%)
Frequency	50 or 60 Hz (adjustable tolerance window up to ±10%)
Short circuit capability	20/15 ln ⁽¹⁾
Acceptable crest factor	up to 4
Changeover switching	bipolar (phase/neutral)
Transfer mode	synchronous/asynchronous
	"break before make"

ENVIRONMENT

IP rating	
Rack model	IP21
Box model	IP32
Operating ambient temperature	0 to 40 °C
Ventilation	natural cooling
Standard compliance	electromagnetic emission EN50022
	class B/class A ⁽¹⁾

(1) Depending on rating.

