



L'Énergie Sans Limite !
Safe Energy for Life !



Mod5T
From 20 to 600 kVA

Data Centers, Critical applications

Mod5T and Mod5T E are the most reliable and suitable UPS for the most critical and demanding equipment. Their modular design makes them highly receptive, flexible, economical and easy to maintain.

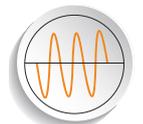
Modular solutions from 20 to 600 kVA : the most reliable protection.

Mod5T and Mod5T E modular technology is key in terms of **optimizing redundancy capabilities** that this design offers. Indeed, in case of shutdown or maintenance work on one of the modules, **the load is automatically and instantly distributed to other available modules**: the equipment thus remains fully protected and powered, **even with just one UPS!**

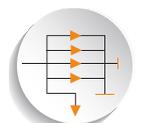
In addition, the dual power supply system of Mod5T range (Dual Input) perfectly suits to the needs of the most demanding configurations as it allows the configuration of a second source of backup power such as a generator for example.



Gamme Mod5T E



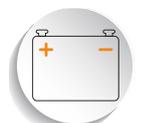
On Line Double
Conversion Technology



Redundancy N + X



High efficiency



Configurable
for long backup time

A range with many advantages:

- Modular solution up to 600 kVA
- **Redundant** power protection (N + X) with backup time
- Optimal performance
- **Flexible** and **scalable** architectures
- Total cost of ownership (**TCO**)
- Management and intuitive configuration
- **Low MTTR**: easy and safe maintenance
- Compact format occupying little floor space

THE IDEAL SOLUTION FOR HIGHLY SENSITIVE APPLICATIONS

- DATA CENTERS
- VITAL INFRASTRUCTURE (banking, health, telecommunications)
- MAJOR INDUSTRIES
- GOVERNMENTAL AUTHORITIES

AN ADEQUATE SOLUTION FOR THE MOST DEMANDING REQUIREMENTS

High efficiency and performance.

The Mod5T and Mod5T E ranges fuse the very best of UPS in terms of rectifier, filter, charger, inverter, controller to ensure the best efficiency and performance possible. Mod5T ensures **96% high overall performance of even at low load of 50% and less than 3% input harmonic distortion rate.**

The Mod5T and Mod5T E ranges are equipped with On Line Double Conversion High Frequency Technology, which provides the best level of security. **Power is continually delivered by the UPS, which additionally guarantees constant voltage without interference.** The critical applications which require protection are perfectly powered because they are **independent from the mains.** The switching time is zero, avoiding brownouts.

Redundancy N + X

The modular UPS are ideal for applications, the tasks of which are essential. Redundancy ensures optimum continuity of services: in case of failure of a power module, power is distributed over the other modules.

REDUNDANCY N+X

“N”: the number of modules to provide the desired power.
“X”: the number of modules to provide security in the case where a module “N” has failed.



In the instance where one of the power modules stops working, other modules share the load of the failed module.



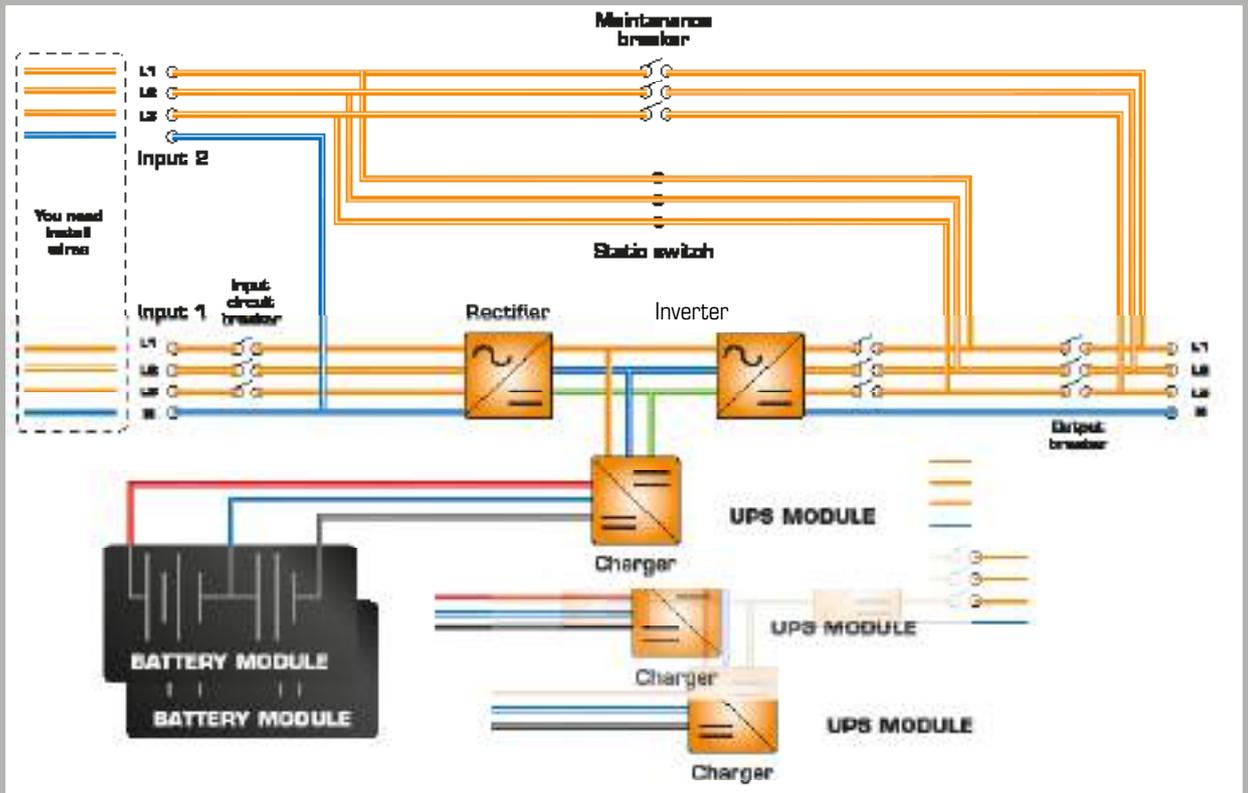
Static bypass and manual bypass.

Its **dual power supply network with independent rectifier and by-pass** is appropriate for use in facilities running separate redundant network systems with generator systems (hospitals, airports, train stations, supermarkets, cold chains, etc.).

In this way, the critical load can be powered by a second source supplying the by-pass circuit, should the main source fail for a lengthy period (see details in the specifications table).

Mod5T

Diagram of
Dual Input
System of Mod5T
up to 210 kVA

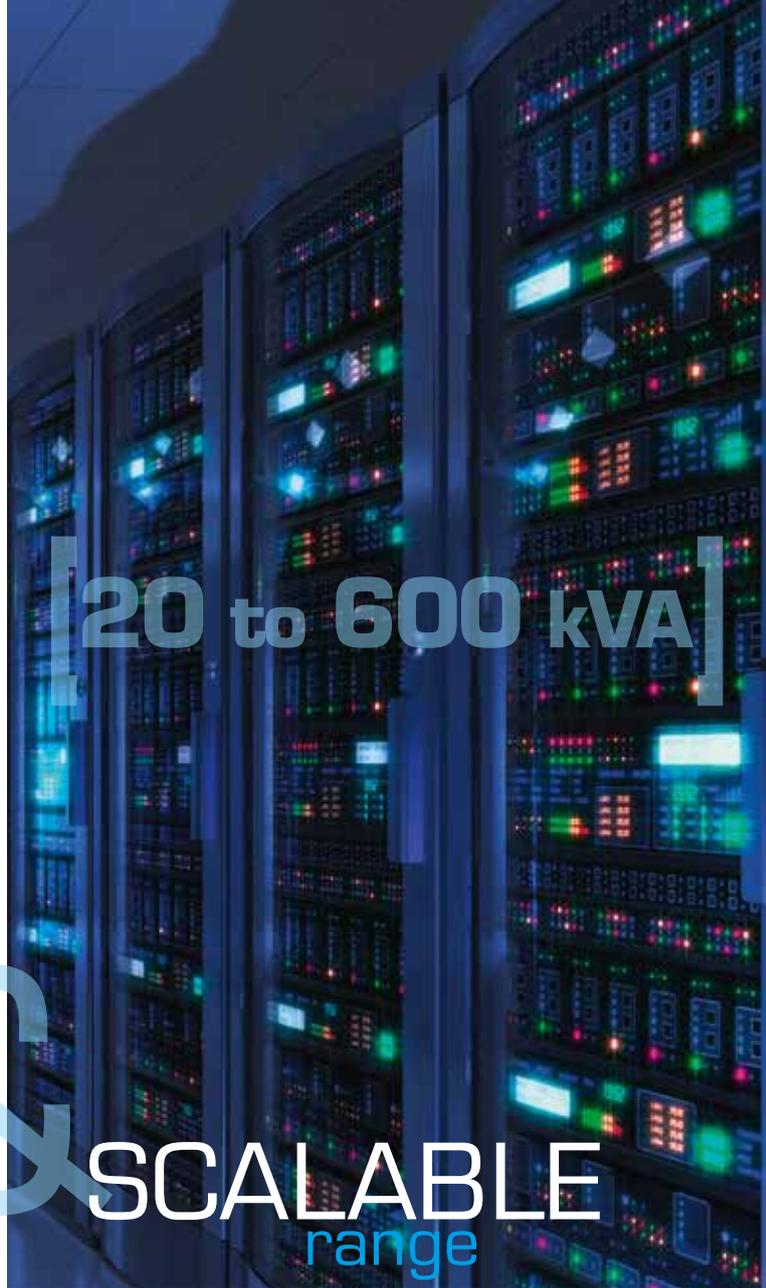


DOUBLE NETWORK CRITICAL LOAD



Flexible and scalable solution.

- The modular Infosec range consists of, on one hand, **Mod5T UPS, a high-end solution** for the most demanding facilities and environments, and, on the other hand, the **Mod5T E UPS, an optimized modular solution for performance/maximum investment.** Scalable, the Infosec modular UPS enable configurations from 20 kVA to 600 kVA with the power divided into **hot swappable power modules** modules of 20 kVA, 30 kVA or 60 kVA modules.
- The modular range can be configured in parallel. By configuring two UPS in parallel, the power and redundancy of the solution is increased for maximum security. The parallel function is integrated as standard until 600 kVA.
- Many backup time extension solutions are possible depending on the power and size of the UPS. The extension can be completed:
 - Either by adding battery modules in the existing cabinet
 - Either by adding one or more additional external battery cabinets containing multiple battery modules.



FLEXIBLE & SCALABLE range

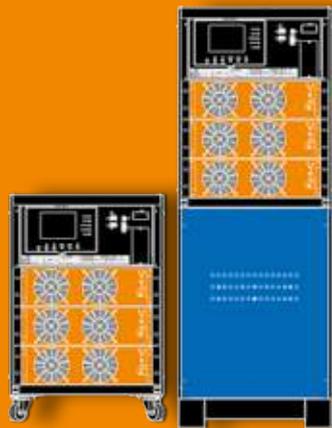


ECONOMIC SOLUTION

The Mod5T E range is available in a single 15U cabinet for up to 3 power modules of 20 kVA or 30 kVA. It is possible to combine a 14U cabinet dedicated to battery modules that can be attached below the power cabinet to provide a compact 29U unit.

15U or 29U cabinet configuration/20 and 30 kVA power modules

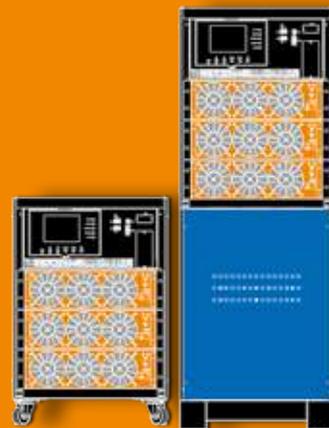
15U cabinet configuration



Mod5T E 60/20 S (15U)

Mod5T E 60/20 (29U)*

29U cabinet configuration



Mod5T E 90/30 S (15U)

Mod5T E 90/30 (29U)*

The Mod5T cabinets are available in 2 versions: 30U or 42U with power modules of 20 kVA, 30 kVA or 60 kVA.

They are equipped as standard with LCD screen, a removable protective door, wheels and feet for easy transport and installation.

30U cabinet configuration

20 kVA power modules

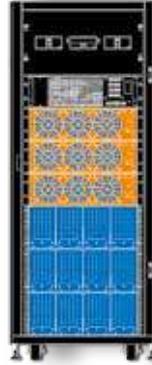


Mod5T 80/20 S



Mod5T 120/20 S

30 kVA power modules



Mod5T 90/30*

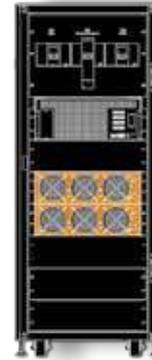


Mod5T 120/30 S

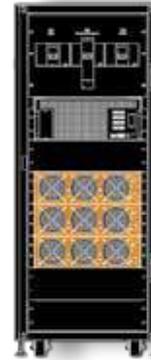


Mod5T 180/30 S

60 kVA power modules



Mod5T 120/60 S

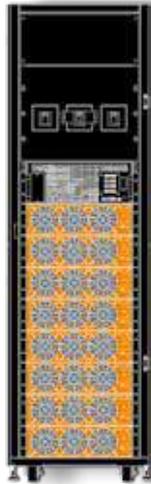


Mod5T 180/60 S

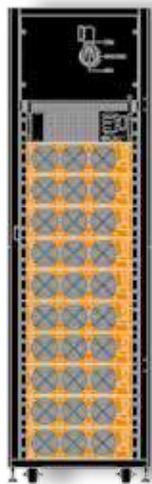
30 kVA power modules



Mod5T 120/30*



Mod5T 210/30 S



Mod5T 300/30 S

 20 kVA, 30 kVA or 60 kVA power modules

 Battery modules

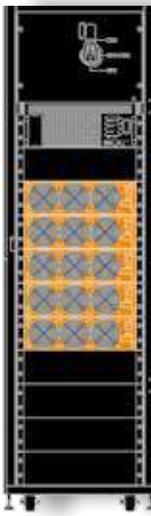
*Exist without batteries

42U cabinet configuration

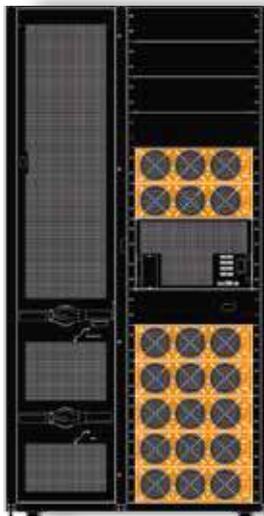
60 kVA power modules



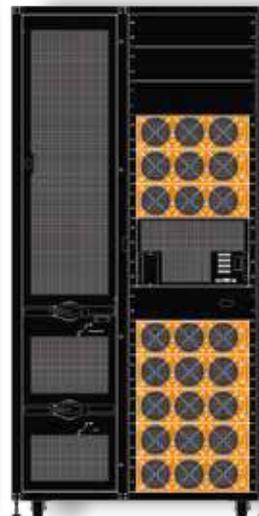
Mod5T 240/60 S



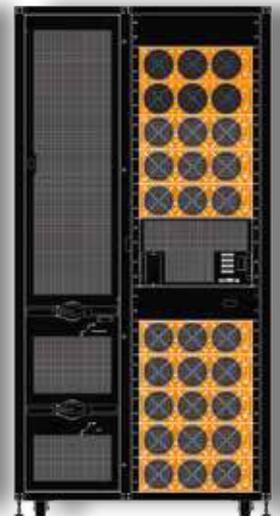
Mod5T 300/60 S



Mod5T 420/60 S



Mod5T 500/60 S



Mod5T 600/60 S

OVERVIEW OF MOD5T UPS



① 20 kVA, 30 kVA or 60 kVA power module

The power modules are available in 20 kVA, 30 kVA or 60 kVA. Each module consists of an 20A max battery charger and has its own controller which ensures full module backup time in all circumstances (maintenance, fault).



② Battery Module

Each battery module consists of 4 battery trays (10 batteries per battery tray). The number of battery modules can be freely varied according to the backup time requirements of the load to be protected to satisfy the most specific time requirements. It is also possible to adjust the number of batteries from 8 to 10 per battery tray.



③ Breakers

Set of input, output and manual By Pass circuit breakers.

④ Graphic LCD control panel

Multilingual LCD screen to monitor the operation of the UPS.

⑤ STS/Control Module (Static Transfer Switch)

STS enables control of the UPS by communicating with the LCD screen, power modules, and communications ports. It also serves a role as a static switch function (By Pass).



CONFIGURATION AND MANAGEMENT OF THE SOLUTION

Locally

The LCD screen and the Mod5T and Mod5T E control buttons provide simple and effective access to various key information from the UPS. The LCD screens of the Mod5T and Mod5T E are bilingual (FR/EN).



5,7" LCD screen



10" LCD touch screen

INFOPOWER CONTROL SOFTWARE PROVIDED AS STANDARD

- Automatic closing of files during a mains failure: data preservation of all the computers in a computer network
- Intuitive graphic interface: to view the system status, the various measures, historical events ...

Via the network

- The dry contacts relay interface integrated as standard enables remote transmission of information on the status of the UPS or the alarms (for a central technical management system for example) (optional for Mod5T E).
- The USB or RS 232 port enables the use of IT infrastructure communication protocols, data centers and telecommunications networks.
- An SNMP Modular location enables the addition of an SNMP agent (optional) in order to manage and control remotely over the network or the Web UPS and power supply.

REMOTE Control

OPTIONS

SNMP card for virtual server

Using the SNMP agent facilitates local and multi-site management of the UPS and network power supply owing to the following features:

- Connection to the Ethernet network and identification by IP address
- Extinction configuration and programming and restart of the system on a weekly (or other) basis ...
- Local or remote UPS configuration



SNMP vm Minislot Agent

SNMP vm Minislot agent facilitates the management of the UPS in network and virtual environments (vmWare®, Hyper V, etc.). The UPS can be identified by a fixed IP address. Combined with the UPS Management software solution, it allows to control the start and shutdown of virtual servers and their associated devices.



Temperature sensor

This environmental condition identification sensor relative to the inverter enables remote monitoring of the temperature and humidity of the local UPS. This sensor works by connecting to the SNMP card, and can also receive dry contacts, making it compatible with security and alarm systems (intrusion sensor, for example).



Programmable communication card

A programmable communication card can be added to enable insertion of a second SNMP slot, RS232 and programming of 6 dry output contacts and 2 dry input contacts.

10" LCD screen

A 10" LCD touch screen allow ease of use and more user-friendly UPS management for models with 20 and 30 kVA modules (standard for Mod5T with 60 kVA power modules).



Mod5T



Mod5T E



BACKUP MODULES

In order to benefit from a prolonged backup-time in demanding environments, external backup modules are available:

- 3 for Mod5T models (one of 30U and two others of 42U)
- 1 for Mod5T E models (14U)

	Backup module Mod5T (30U) with batteries*	Backup module WOB Mod5T (30U) without batteries*
Reference	67712	67718
Number of trays	28 trays max (10 batt max per tray)	28 trays max
Dimensions - HxWxD (mm)	1100 x 600 x 1475 (30U)	1100 x 600 x 1475 (30U)
Net weight - kg (battery bank)	1003 (with max number of batteries)	149

	Backup module Mod5T (42U)	Backup module WOB sMod5T (42U)
Reference	67713	67719
Number of trays	40 trays max (10 batt max per tray)	40 trays max
Dimensions - HxWxD (mm)	1100 x 600 x 2010 (42U)	1100 x 600 x 2010 (42U)
Net weight - kg (battery bank)	1440 (with max number of batteries)	220

	Backup module Mod5T (42U)	Backup module WOB Mod5T (42U)
Reference	67714	67720
Battery type & number max	40 Batteries of 100Ah	40 Batteries of 100Ah
Dimensions - HxWxD (mm)	1100 x 600 x 2010 (42U)	1100 x 600 x 2010 (42U)
Net weight - kg (battery bank)	1495 (with max number of batteries)	215

	Backup module Mod5T E (14U)	Backup module WOB Mod5T E SB (14U)
Reference	67715	67721
Number of trays	12 trays max (10 batt max per tray)	12 trays max
Dimensions - HxWxD (mm)	1000 x 515 x 761 (14U)	1000 x 515 x 761 (14U)
Net weight - kg (battery bank)	407 (with max number of batteries)	83

* Backup modules are delivered assembled but with the batteries separate

APPLICATIONS

Data Centers

Data processing centers are strategic and essential to the company. Thanks to the age of virtualization they are key players for the companies: their mission is essential and their servers run continuously. Therefore, in order to maintain the competitiveness and performance of these facilities, INFOSEC recommends its **range of modular UPS systems to ensure an unfailing continuity of service**. Infosec's modular solutions enable operators of these treatment centers to **improve the efficiency of their equipment, in order to offer a more secure response to their clients needs**.



Industrial equipment

Production lines using equipment that cannot endure a power failure, including brownouts, have a critical need of power protection. Industries are also directly affected by the ongoing need to have access to an uninterrupted power supply.

The adaptability of the **Infosec modular range** to all types of loads even the most difficult (inductive, capacitive, non-linear, discharge lamps, induction motors ...) and its high yield make it the **ideal solution to provide power and the continuity of activities and services for all kinds of industrial applications**.



Infrastructures

IT infrastructures, now increasingly vital to company function, have an increased security requirement because their operation must be continuous and not suffer any unexpected outage. This is the case for among others health, transport or To meet these demanding requirements, Infosec's modular UPS systems **can protect and ensure a continuous power supply to their sensitive equipment**.

The advantages of **Mod5T and Mod5T E** are multiple: advanced technologies, redundancy, energy performance and flexibility...



Finance and telecommunications sectors

Through the generalization of online financial transactions, or the growth of telecommunications, these sectors require a secure and reliable power supply to guarantee uninterrupted operations. **Mod5T and Mod5T E UPS devices can provide the backup required to avoid forced outages**. In addition the effective communication systems of **this UPS allow 24/7 remote monitoring, ensuring an immediate response in the event of a problem or failure on the network**.



SERVICES & TECHNICAL SUPPORT

Pre-sales and after-sales services provide an appropriate solution to your needs to ensure the durability, reliability and availability of your UPS.



Technical requirements & pre-installation assistance

A needs pre-qualification questionnaire will help validate the technical choices and options selected for each installation configuration. Our technical sales team can be consulted for the most complex issues.



Installation, testing, commissioning

An INFOSEC engineer or an INFOSEC certified installer will come to your site to install and start-up the UPS. A test report would be then provided.



Technical support hotline

The after-sales service can be contacted quickly by phone and/or email to answer any questions or technical queries.



Replacing the batteries

It is important to ensure the proper operation of the batteries which, after a few years of operation must be changed (between 3 and 5 years depending on the room temperature, number of charge and discharge cycles).

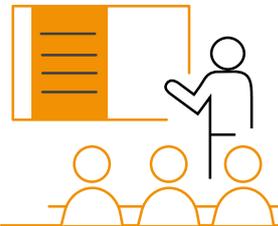
The batteries absolutely must be changed by a professional: only an INFOSEC engineer or approved INFOSEC engineer may intervene on request.



+33 2 40 76 15 82

hotline@infosec.fr

Hotline

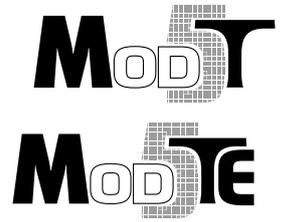


Technical training

INFOSEC makes technical training available for its partners and customers :

- Training in the use subsequent to on-site commissioning.
- More comprehensive training on all INFOSEC UPS SYSTEM product lines for authorised partners.
- Technical-sales training for sales support and to calculate the size of a UPS according to the facilities to be protected.

TECHNICAL SPECIFICATIONS



Mod5T		Mod5T E S
Mod5T	Mod5T S	

GENERAL CHARACTERISTICS

Phase	3-Phase in / 3-Phase out		
Power	from 30 to 120 kVA	from 20 to 600 kVA	from 20 to 90 kVA
Power factor	1*		
Batteries	Integrated	External	External
Power module	30kVA/30kW	20kVA/20kW 30kVA/30kW 60kVA/60kW	20kVA/20kW 30kVA/30kW
Battery tray Dimensions (LxIxh) mm	1100 x 600 x 1475 (30U) 1100 x 600 x 2010 (42U) 1100 x 1200 x 2010 (42U- 420-500-600/60 S models)		1100 x 515 x 761 (15U)
Net weight (kg)	30U 227 (STS 80/20) 186 (STS 120/20) 259,5 (STS 90/30) 197 (STS 120/30) 230,5 (STS 180/30) 270 (STS 120/60) 300 (STS 180/60)	42U 274 (STS 120/30) 273 (STS 210/30) 275 (STS 300/30) 466 (STS 240/60) 510 (STS 300/60) 888 (STS 420/60) 932 (STS 500/60) 1020 (STS 600/60)	74 (STS 60/20) 77 (STS 90/30)
20kVA power module Dimension (LxIxh) mm	650 x 440 x 130 (3U)		
20kVA power module Net Weight (Kg)	34		
30kVA power module Dimension (LxIxh) mm	650 x 440 x 130 mm (3U)		
30kVA power module Net Weight (Kg)	34,5		
60kVA power module Dimension (LxIxh) mm	750 x 440 x 130 mm (3U)		
60kVA power module Net Weight (Kg)	44		
Battery tray Dimensions (LxIxh) mm	767 x 107 x 170 mm		
Battery tray Net Weight (Kg)	3,5		

INPUT

Nominal Voltage	3 x 380VAC/400VAC/415VAC (3Ph+N)
Voltage Range	305 ~ 478 VAC at 100% load ; 208 - 304VAC at <70% load
Nominal frequency	50/60Hz (Auto sensing)
Frequency range	40Hz - 70Hz
Power factor	> 0.99 at 100% load, >0.98 at 50% load
Harmonic Distortion (THDi)	< 3% @ 100% load

OUTPUT

Nominal Voltage	3 x 380VAC/400VAC/415VAC (3Ph+N)
Voltage Regulation (Steady state)	<=± 1% Typical (balanced load) <=± 2% Typical (unbalanced load)
Voltage Regulation (Transient)	<=± 5% Typical
Nominal frequency	50/60Hz
Frequency Range (Synchronized range)	46Hz ~ 54Hz ou 56Hz ~ 64Hz
Overload Capability	1 hour for 110%, 10 mins for 125%, 1 min for 150%, 200ms for >150%
Harmonic Distortion (THDv)	<= 2% THD (Linear Load) <= 4% THD (Non-linear Load) <=1% THD (linear load) <= 3% THD (non linear load) for models with 60 kVA modules
Efficiency	Up to 94.5% - 96% for Mod5T from 120 to 600/60 S

BATTERY / CHARGER

Nominal Voltage	+/- 240V (12V x 40 Pcs)
Floating Charge Voltage	2.25V/element
Boost Charging Voltage	2.35V/element
Temperature Compensation	Yes
Maximum Charging Current	6A for each 20 kVA power module (ajustable) 8A for each 30 kVA power module (ajustable) 20A for each 60 kVA power module (ajustable)

MANAGEMENT / COMMUNICATION

Communication	USB & RS232 port (supports Windows 2000/2003/XP/Vista/2008/7/8/10, Linux, Unix and MAC)
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ENVIRONMENT

Operation Temperature	0 ~ 40°C	
Relative Humidity	0 ~ 95% non-condensing	
Altitude**	<1000m for Nominal power	
Noise level at 1 meter	75dB max.	70dB max.
IP Class	IP 20	

NORMS

Standard	CE RoHS
EMC (Electromagnetic compatibility)	EN62040-2:2006
Low voltage (Safety)	EN 62040 1 : 2008 + A1:2013

Product specifications are subject to change without further notice.

*When temperature is above 30°C, the output power factor will be de-rated, 0.8 at 31°C~35°C and 0.7 at 36°C~40°C.

**If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be derated one percent per 100m.

Communication and remote management solutions

USB communication ports, RS 232, SNMP and EPO

Software:

- UPS startup and shutdown programming
- Data and events recording enabling daily maintenance
- E-mail messaging service to manage UPS status at all times via the local network
- Free download on the website

Packaging Content

- Modular Cabinets
- Power modules (depending on model)
- RS-232 cable
- Bus Bar battery (models with 60 kVA modules)
- USB cable
- Manual
- Software
- Depending on the model: internal battery or external cabinet modules

Options

Designation	Réf
Modular SNMP Agent	61156
SNMP vm Minislot agent	61142
EMD (temperature and humidity sensor)	61452
Programmable communication card	67816
10" color screen (Mod5T)	67817
Additional battery cabinets	page 9

Warranty

One-year guarantee against manufacturing defects under normal conditions and compliance with precautionary measures.

Warranty to be taken out on our website within 10 days of purchase.



Maintenance contract

A Maintenance contract is highly recommended: contact hotline@infosec.fr



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