



L'Énergie Sans Limite !  
Safe Energy for Life !



M5T HD  
20/30/40/60kVA

## Critical, industrial and medical applications

The M5T HD range is the new three-phase solution designed to protect engines with braking systems such as lifts which have energy regeneration function or frequency converters. It offers all the features needed to ensure maximum security, even in sensitive environments.

### A special protection

The M5T HD range is equipped with On Line Double Conversion technology, controlled by microprocessor, and is intended to extend the lives of motorized equipment such as lifts for example.

Connected to the M5T UPS, the external accessory HD Box is equipped with an internal resistance bench which absorbs the current returned by the motorized protected equipment featuring energy regeneration function as :

- Lifts equipped with a regenerative drive system
- Frequency converters and other engine braking system
- Engines with braking system

This feature ensures the service continuity of the connected equipment and preserves the vital functions of the UPS.



On Line Double Conversion Technology



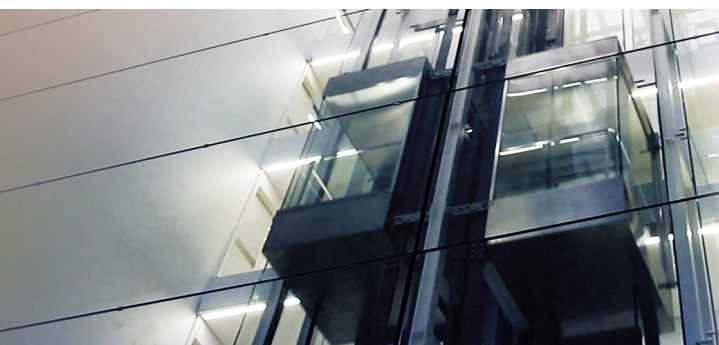
High Efficiency



Remote control software



Extended backup time available



### Main benefits of the M5T HD

**M5T HD UPS**  
are equipped with an energy box that makes them compatible with motorized devices including a braking system.



## A RELEVANT ANSWER TO THE MOST DEMANDING NEEDS

### On Line Double Conversion Technology

M5T HD product range is equipped with the On Line Double Conversion with High Frequency Technology, providing the users with the highest security level. The current is constantly delivered by the UPS device, thus guaranteeing a constant voltage level with a perfect stability. Critical applications are therefore supplied with a perfect current as they are independent from the mains input. There is no commutation time and no micro-power shortage. The output power factor is optimal, reaching 1.

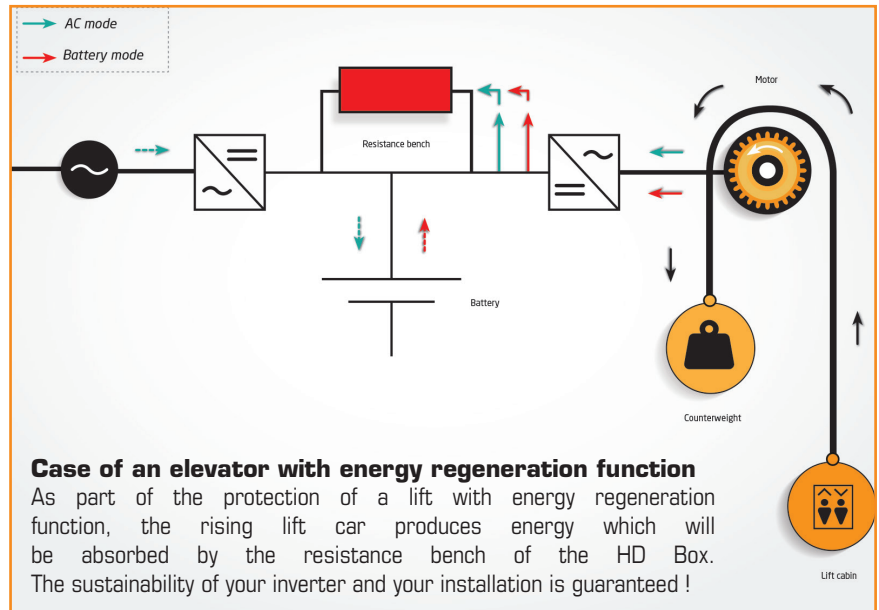
### High output and performance

M5T HD ranges combine the best UPS in terms of rectifier, filter, charger, UPS, DS controller to ensure the best possible efficiency and performance. M5T HD UPS ensures a high overall efficiency of 96%.

### Extended Backup Time

In order to get extended backup time, battery extension modules can be connected as an option to M5T HD.

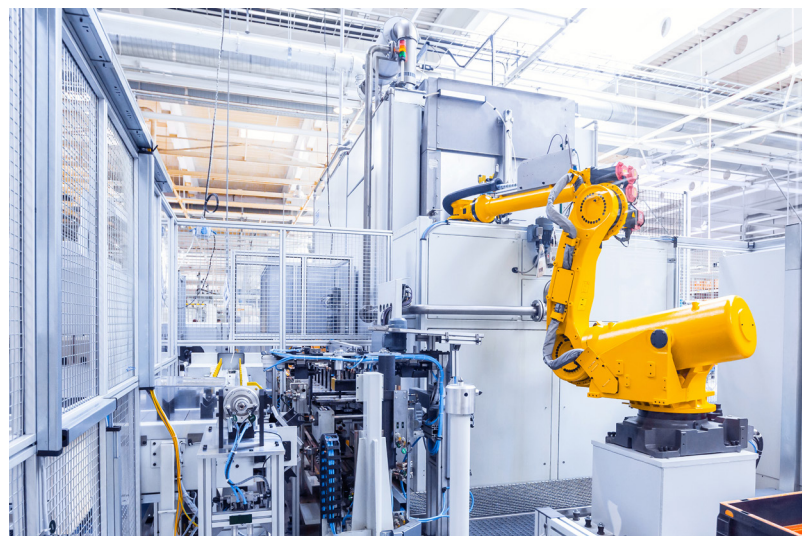
Depending on the type of installation and equipment to protect (single UPS device or several devices connected in parallel), backup time need may vary. Large and scalable range of battery banks allows to answer most of the needs.



### Optimum Design: Small Footprint

M5T HD has been designed with an optimized architecture, allowing to significantly reduce the occupied space of the product. Its internal components being of a smaller size than the average UPS parts, the cabinet of M5T HD has been minimized and is distinctly smaller than the average volume of UPS devices of equivalent power.

M5T HD can easily adapt to the stocking constraints of small and larger businesses and all types of environment.



## SECURITY AND SERVICE CONTINUITY

### Easy maintenance

M5T HD power system is composed of several power boards installed in parallel that can be switched easily.

Maintenance interventions are simplified and safer for the technicians, reducing the overall costs of maintenance operations.

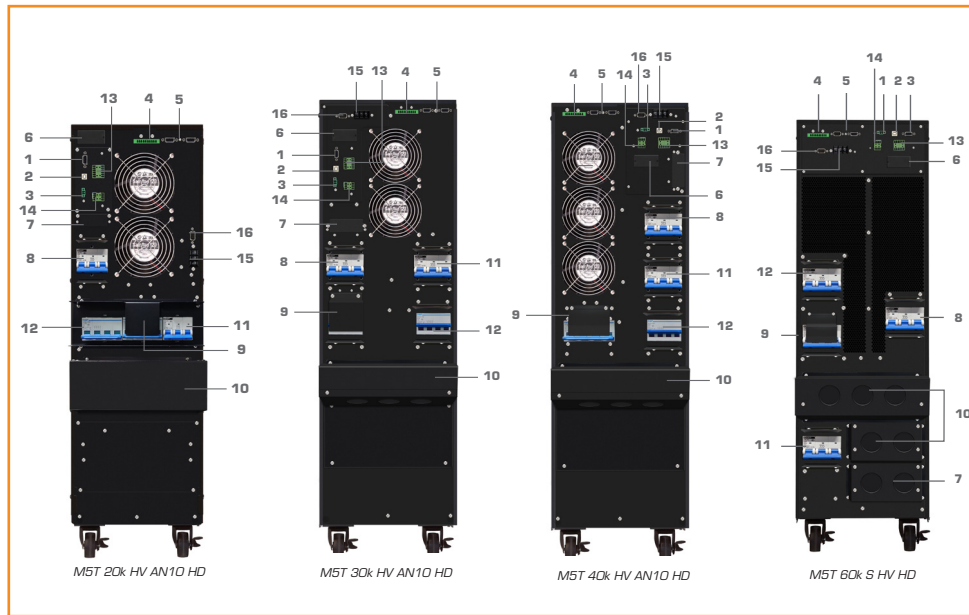
### DSP - Digital Signal Processor

M5T HD as a processor dedicated to calculations and signal quality: the DSP has the ability to process a huge amount of information in real time (20 million instructions per second). On one hand, the DSP controls the rectifier and the network current quality and, on the other hand, it controls the output voltage quality thus guaranteeing users exceptional performance in terms of voltage accuracy, efficiency and reliability.



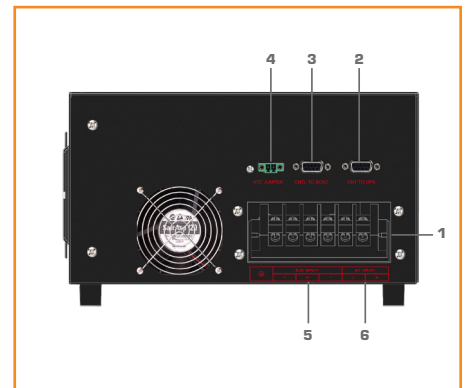
# CONNECTION

## M5T



- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>1. RS-232 communication port</li> <li>2. USB communication port</li> <li>3. Emergency power off function connector (EPO connector)</li> <li>4. Share current port</li> <li>5. Parallel port</li> <li>6. Intelligent slot</li> <li>7. External battery connector/terminal</li> <li>8. Line input circuit breaker/switch</li> </ul> | <ul style="list-style-type: none"> <li>9. Maintenance bypass switch (option)</li> <li>10. Input/Output terminal</li> <li>11. Bypass input circuit breaker/switch</li> <li>12. Output switch</li> <li>13. 8-pin input dry contact ports</li> <li>14. 6-pin output dry contact ports</li> <li>15. High voltage DC BUS terminals</li> <li>16. Signal port</li> </ul> |
|--|---|

## HD BOX



1. Terminal block
2. Control port to the UPS
3. Control port to HD Box + 1 (in the case of HD Box in parallel)
4. Temperature sensor terminal block
5. DC BUS connection terminals to the UPS
6. AC power terminals

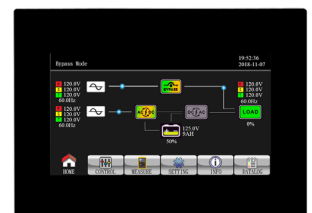
### Parallel installation

To ensure system security and meet the need for system flexibility and upgradability, up to 3 HD Box units can be connected in parallel.

## EASE OF USE AND COMMUNICATION

### LCD Screen

- Sharp and user friendly: status indicators and real-time parameters information
- Intuitive LCD display on the front panel: direct access to the UPS settings for a quick adjustment of the operational modes (output voltage settings...)
- Frequency setting on 50 or 60 Hz or auto-detection (easily set from the LCD screen of the device)



### Remote Controlling through USB & RS232 ports

The USB and RS232 ports allow to use the communication protocols developed for IT infrastructures, data centers and telecommunications networks.

These features enable remote control of the UPS and to alert set in order to obtain real-time information on its functioning status.

The user interface allows to program the shutdown of the connected devices and applications protected by the UPS in order to avoid any information loss, and to prevent from potential damage caused to the machines.

### INFOPOWER SOFTWARE

Designed to simplify remote monitoring of the UPS, InfoPower software is a user-friendly interface for computers allowing to define different settings in case of a power failure, or to monitor the different UPS status

### Communication options

Using an SNMP makes it easier to manage the UPS M5T HD. 2 solutions :

- SNMP I Pro : network management
- SNMP vmMinislot : virtual network management



# TECHNICAL SPECIFICATIONS

M5T HD are standard UPS delivered with the **M5T HD Box external accessory**. It is equipped with an **integrated resistance bench** which makes the M5T 20/30/40/60 kVA UPS compatible with motorized devices including a braking system.

# M5T HD

## 20 / 30 / 40 / 60 kVA

M5T 20k HV AN10 HD	M5T 30k HV AN10 HD	M5T 40k HV AN10 HD	M5T 60k S HV HD
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## GENERAL CHARACTERISTICS

		On Line Double Conversion			
<b>Technology</b>		On Line Double Conversion			
<b>Power (VA)</b>		20kVA	30kVA	40kVA	60kVA
<b>Power (W)</b>		20kW	30kW	40kW	60kW
<b>Power factor</b>		1			
<b>HD Box</b>	<b>Input voltage</b>	390VDC ~ 410VDC			
	<b>Power</b>	3KW (6KW max)			

## PHYSICAL CHARACTERISTICS

<b>UPS</b>	<b>Dimensions L x W x H (mm)</b>	627 x 250 x 826	815 x 300 x 1000		815 x 300 x 1000
	<b>Net weight (kg)</b>	125	213	243	87*
<b>HD box</b>	<b>Dimensions L x W x H (mm)</b>	750 x 320 x 196			
	<b>Net weight (kg)</b>	15			

## INPUT

<b>Nominal voltage</b>	3 x 400 VAC (3Ph+N)	3 x 380/400/415 VAC (3Ph+N)
<b>Acceptable voltage range</b>	190-520 VAC (3-phase) @ 50% load 305-478 VAC (3-phase) @ 100% load	-30% ~ +20%
<b>Frequency range</b>	46~54 Hz or 56~64Hz	40~70 Hz
<b>Phase</b>	Three phase	
<b>Power factor</b>	>=0.99 @ 100% Load	
<b>Harmonic Distortion</b>	-	< 3% @ 100% at full linear load
<b>Dual Input</b>	Yes	

## OUTPUT

<b>Nominal voltage</b>	3 x 360**/380/400/415 VAC (3Ph+N)	
<b>Voltage regulation (battery mode)</b>	± 1%	
<b>Frequency Range (Synchronized Range)</b>	46~54Hz or 56~64Hz	
<b>Frequency Range (Batt. Mode)</b>	50 Hz ± 0.1 Hz ou 60 Hz ± 0.1 Hz	
<b>Admissible crest factor</b>	3:1 (max.)	
<b>Harmonic distortion</b>	<=2 % THD (Linear Load) <=4 % THD (non Linear Load)	<=1 % THD (Linear Load) <=3 % THD (non Linear Load)
<b>Transfer Time</b>	<b>Line mode to Battery mode</b>	0 ms
	<b>Inverter to Bypass</b>	0 ms
<b>Output form</b>	Pure Sinewave	
<b>Output connection</b>	Terminal	

## EFFICIENCY

<b>AC mode</b>	94%	96%
<b>Eco Mode</b>	97%	99%
<b>Battery mode</b>	93,5%	96%

## BATTERY

<b>Standard model</b>	<b>Typical Recharge Time</b>	9 hours @ 90% capacity	
	<b>Charging current (max)</b>	12A	
	<b>External backup module</b>	No	
	<b>Backup time</b>	Depending on the connected load	
<b>Extended backup time model (S)</b>	<b>Battery type</b>	Depending on the backup time requested	
	<b>Battery numbers</b>	Depending on the backup time requested	
	<b>Charging current (max)</b>	12A	18A
	<b>External backup module</b>	Yes	Yes

## INDICATORS & ALARMS

<b>LCD Screen</b>	5"LCD Touch Screen	7"LCD Touch Screen
<b>Audible alarms</b>	Battery mode, low battery, overload and fault	

## BYPASS

<b>Static bypass</b>	Yes
<b>Manual bypass</b>	Yes

## MANAGEMENT / COMMUNICATION

<b>Communication via RS-232 / USB port</b>	Support Windows family, Novell, Linux, Mac, FreeBSD	
<b>Optional SNMP I Pro</b>	Management system through SNMP software (VMware®, Hyper V™ compatible) and web browser	
<b>EPO Connector</b>	Yes	
<b>Parallel installation</b>	<b>UPS</b>	<b>HD BOX</b>
	4	6
	3	

## ENVIRONMENT

<b>Operating Temperature and Humidity</b>	0-95 % RH à 0-40°C (without condensation)		
<b>Noise level</b>	Less than 60dB@1Meter	Less than 70dB @1Meter	Less than 65dB @1Meter

## NORMS

<b>Standard EMC</b>	CE RoHS
<b>LVD (Safety)</b>	EN62040-2:2006+AC:2006 EN62040-1: 2008+A1:2013

## SALES INFO

<b>Warranty</b>	1 year			
<b>PN</b>	67686	67683	67684	67685

\* Net weight without batteries

\*\* When output voltage is set as 3 x 360VAC, the output power of the unit will be derated to 90%.  
Product specifications are subject to change without further notice.

**BMDIY M5T 60k GG384 T**  
**Backup Module M5T 60k S HV HD**

## GENERAL CHARACTERISTICS

<b>Dimensions L x W x H (mm)</b>	1190 x 880 x 780
<b>Net weight (kg)</b>	536
<b>PN</b>	67564

## Communications solutions and remote management

USB & RS232, SNMP & EPO communication ports

Infopower software :

- Simple user interface
- UPS startup and shutdown programming
- Data and events record enabling daily maintenance
- E-mail messaging to manage UPS status at all times via the local network
- Free download from the website [www.infosec-ups.com](http://www.infosec-ups.com)

## Package content

M5T UPS

- User's manual
- RS-232 cable
- USB cable
- Battery cable

HD Box M5T

- Input cable
- BUS cable
- Communication cable

## Options

Designation	Ref
SNMP I Pro Agent	61156
SNMP vm Minislot agent	61142
Dry Contact Card (AS 400) (M5T 60k S HV HD)	61454
Isolation transformer	NC
Modbus card	61439
Environment Measure Device (EMD)	61452
Additional Backup module	NC

## Warranty

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

Warranty to be registered on the website within 10 days of purchase.



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