UPS EVO DSP PLUS MODULAR HE

20-300 KW

TECNOWARE®

ITALIAN POWER SYSTEMS

EVO DSP PLUS MODULAR HE

TECNOWARE is proud to introduce the new EVO DSP PLUS MODULAR HE UPS featuring a **Modular Hot Swap System**: each module is fully independent, which results in easy and quick maintenance without the need to turn off the UPS. Its scalable structure facilitates increasing both power and back-up time simply by adding Power Modules (20 KW or 30 KW) and Battery Modules.

The Hot Swap System and the **modular redundancy** design guarantee the excellent performance of the EVO DSP PLUS MODULAR HE UPS, without any interruptions at all, even in case of a fault, scheduled maintenance or any other kind of tasks.

The EVO DSP PLUS MODULAR HE model is the perfect protection for Data Centers, Local Area Networks (LAN), industrial processes, electromedical equipment and all kinds of critical applications that can in no way stop their operations.

EASY HOT SWAP DESIGN

POWER AND BATTERY SCALABLE SYSTEM

FLEXIBLE MODULAR DESIGN

NO-DOWNTIME SYSTEM

N+1 OR N+X REDUNDANCE PARALLELABLE SYSTEM

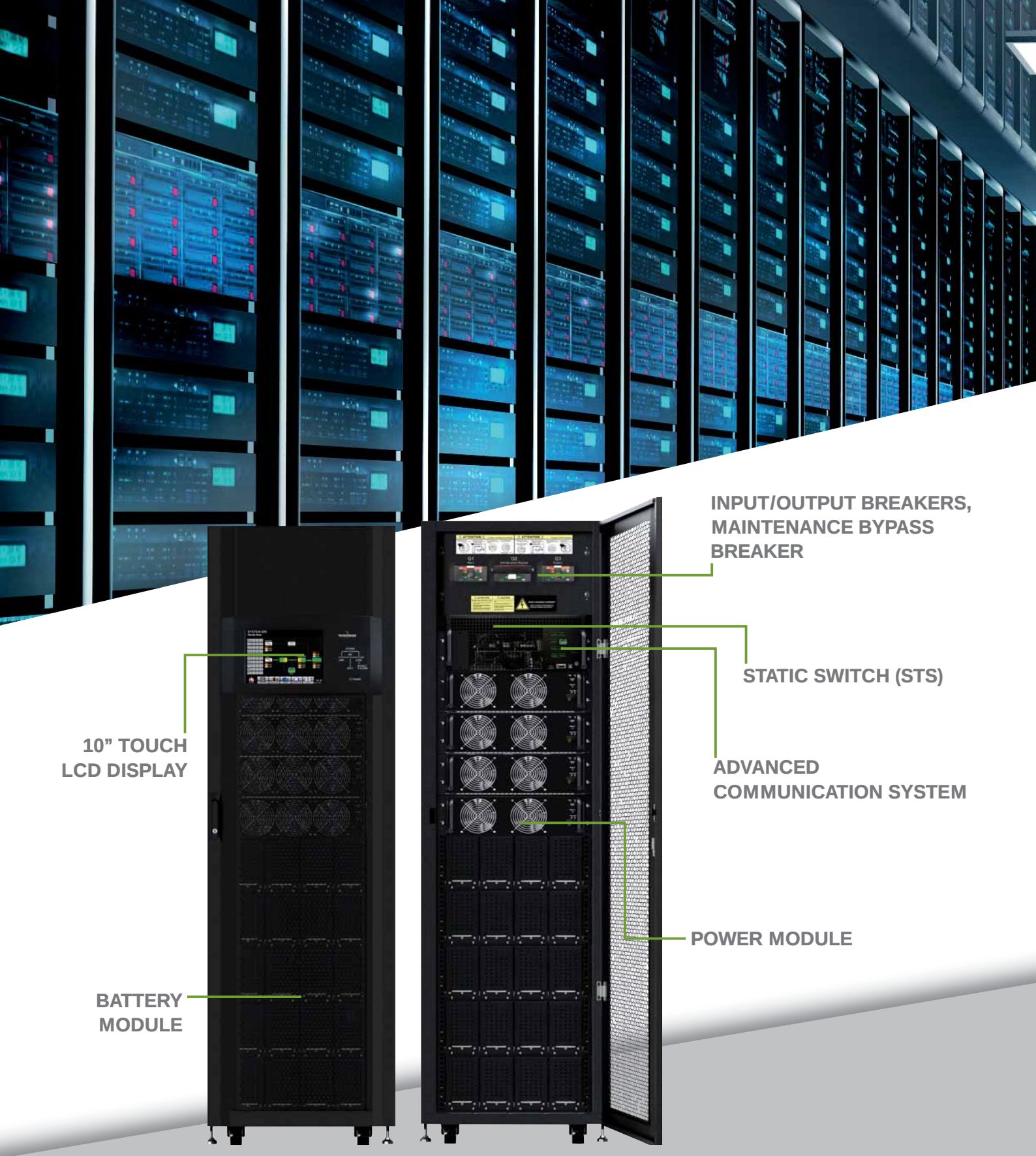
HI EFFICIENCY

FULL ADVANCED COMMUNICATION SYSTEM

TECNOWARE

Years of experience and a careful design and development process are poured into the EVO DSP PLUS MODULAR HE UPS so that it becomes the answer to what the market always demands: more reliable and safer products plus optimisation of investments, both current and future.

A large investment in Research & Development made it possible to design and manufacture this EVO DSP PLUS MODULAR HE UPS that reaches total reliability, protection and efficiency, whilst not forgetting simplicity, safety and savings.


INPUT/OUTPUT BREAKERS,
MAINTENANCE BYPASS
BREAKER
STATIC SWITCH (STS)
10” TOUCH
LCD DISPLAY
ADVANCED
COMMUNICATION SYSTEM
POWER MODULE
BATTERY
MODULE

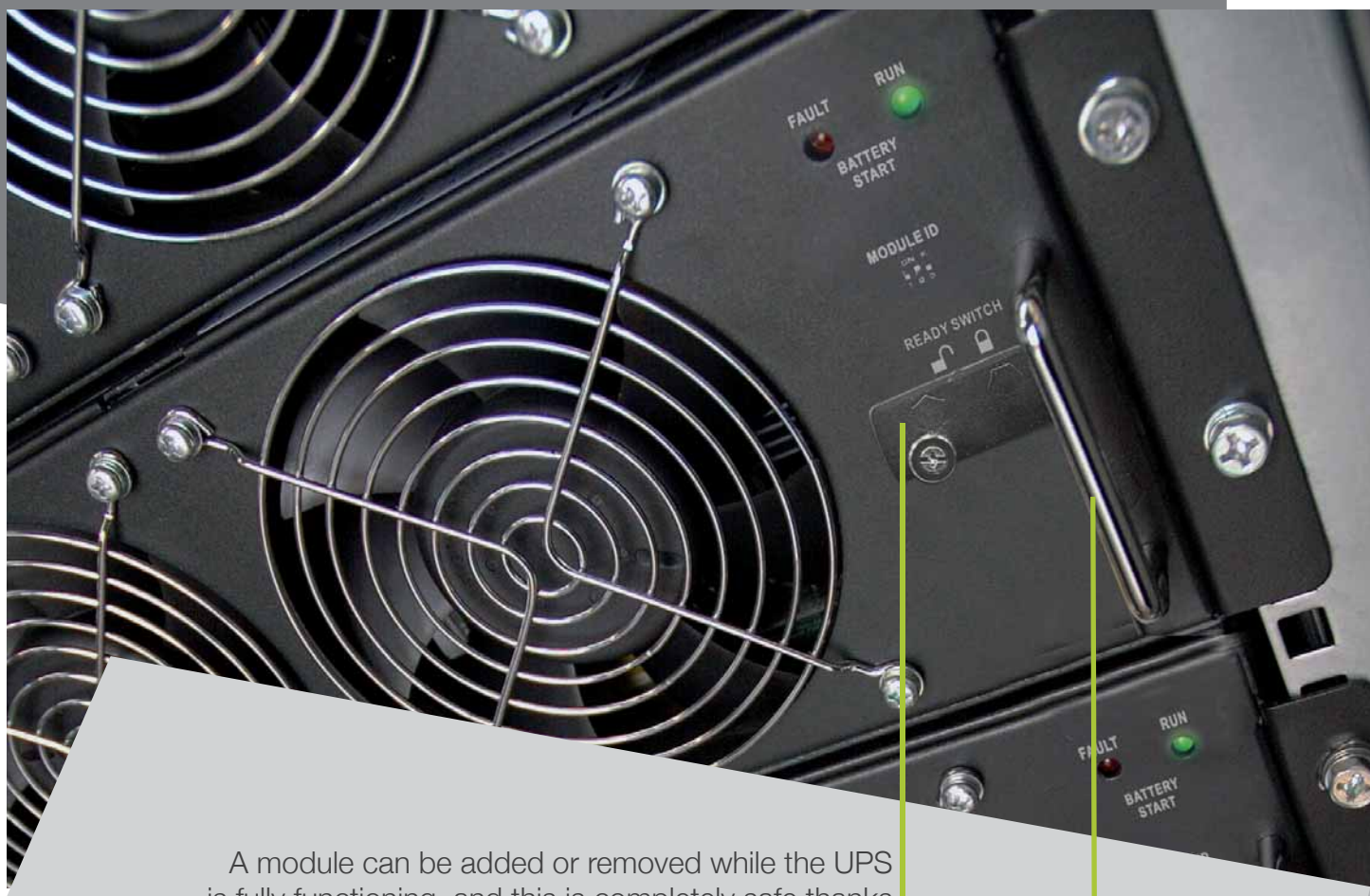
10” touch LCD display

10” TOUCH LCD DISPLAY DESIGN FOR EASY MANAGEMENT

Designed for easy management,
the intuitive and advanced 10” LCD touch display
offers an improved navigation, interaction
and visibility of the operating parameters.

EASY HOT SWAP DESIGN

The range of cabinets of the EVO DSP PLUS MODULAR HE UPS as well as its Power and Battery Modules have been designed to simplify the operations to connect/disconnect the unit as much as possible. In fact, the Modules are connected to the Cabinet via a patented system that guarantees total functional reliability and safety.



A module can be added or removed while the UPS is fully functioning, and this is completely safe thanks to an electro-mechanical locking/unlocking device.

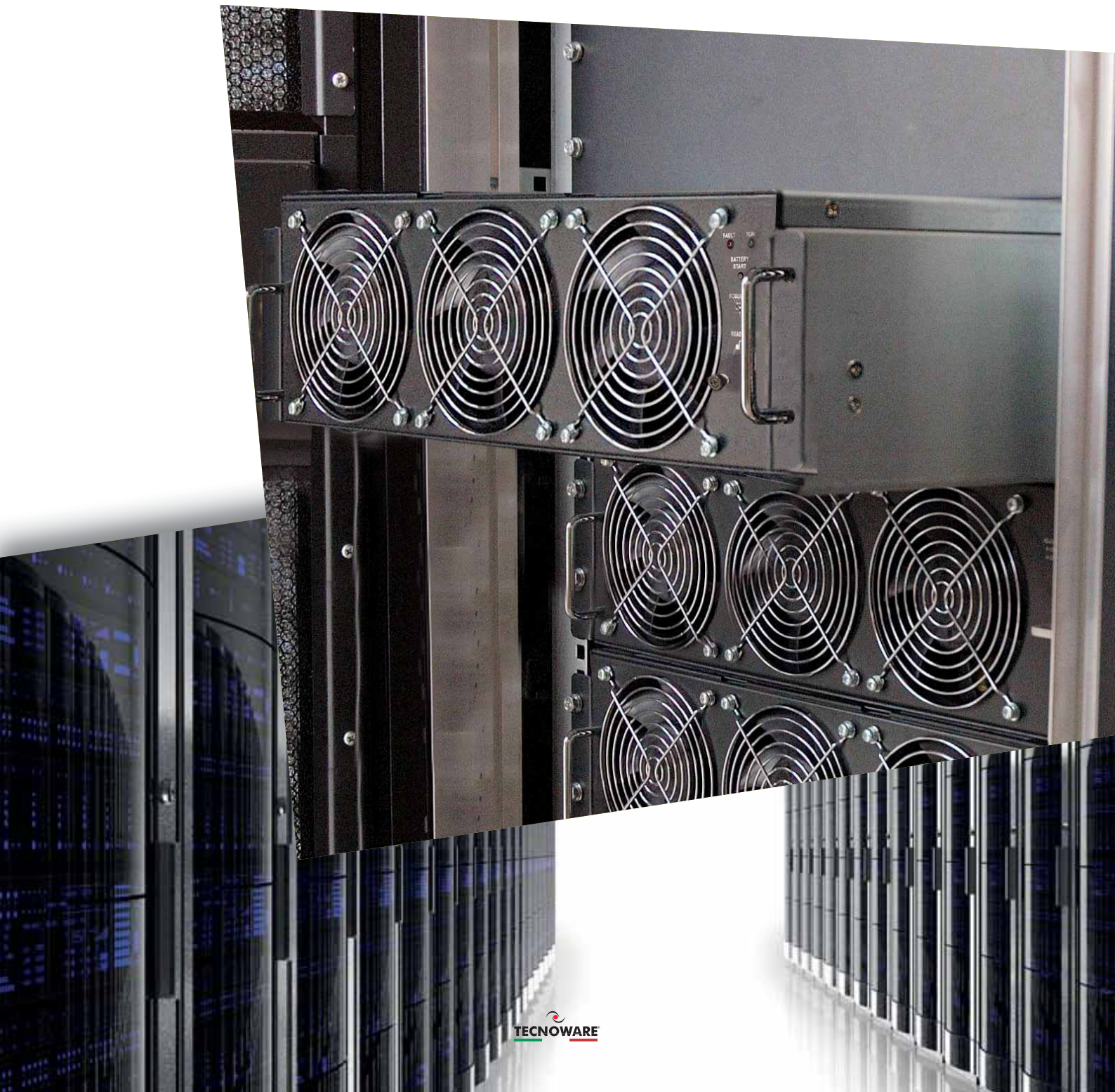
A module can be activated via a locking device provided that it is properly installed. A module can be removed only after it is disabled by means of the unlocking device.

Built-in handle to facilitate carrying the module.

POWER AND BATTERY SCALABLE SYSTEM

The EVO DSP PLUS MODULAR HE UPS has been conceived to optimise time investments so that you can purchase a UPS system that can operate at power and back-up time configurations that exceed current requirement and at the same time that is equipped with Power and Battery Modules that meet current needs.

If more power or back-up time are needed, simply add as many modules as needed. In addition, there is no need to replace the UPS or modify the electrical installation.



FLEXIBLE MODULAR DESIGN

The EVO DSP PLUS MODULAR HE UPS system comes in 9 different cabinet models with a Static Switch (STS) with powers ranging from 80 KW to 300 KW.
The power desired is obtained via parallel Power Modules from 20 KW to 30 KW.

Two models, 90KW-30U and 120KW-42U, also feature slots for the Battery Modules inside the cabinet.

To round off the range, there are 3 battery cabinet models:

- a cabinet that can accommodate up to 28 Battery Modules
- a cabinet that can accommodate up to 40 Battery Modules
- a cabinet with flat racks to accommodate 40 12V-100Ah Batteries

Many different configurations that perfectly meet both current and future requirements are possible thanks to the wide range of solutions offered.

NO-DOWNTIME SYSTEM

The major advantage of the EVO DSP PLUS MODULAR HE UPS lies in its capacity to guarantee a **total continuity solution** for powered devices if an unexpected failure occurs and a module needs replacing, or when the system is serviced (scheduled maintenance) or needs reconfiguring by adding Power or Battery Modules.

If a module fails, it is automatically disabled by the system. In that way the rest of the modules can keep on functioning properly.

It is thanks to the **Hot Swap System** that a failing module can be safely removed and replaced with a new one. The new module will be activated and integrated into the system parallel to the rest of the modules.

The EVO DSP PLUS MODULAR HE UPS also features dedicated devices to ensure a further safety level for the continuity of the system such as the **STS (Static Switch)** and the **manual bypass**.

The **STS (Static Switch)** features a double power supply with a redundancy function so that the risk that a SHUTDOWN occurs is completely excluded.

N+1 OR N+X REDUNDANCE PARALLELABLE SYSTEM

The **redundant modular design** of the EVO DSP PLUS MODULAR HE UPS allows getting high levels of reliability without the need to buy other 2 or more products for the redundancy, as it is the case with a standard UPS.
This also results in significant savings.

The EVO DSP PLUS MODULAR HE UPS also makes it possible to configure the level of redundancy desired via a front interface, a 10” touch LCD display, so that the protection degree necessary for the device the UPS protects is always attained.
This **redundant modular design** helps decide whether one (N+1) or several (N+X) Power Modules need to be set up as a reserve for the main modules.

If one of the main Power Modules fails, the reserve module will replace the faulty one at once and will set the UPS system so that it does not undergo any power reduction effect.

If the redundancy is not configured instead, the system will undergo a power drop until the failing module is restored.

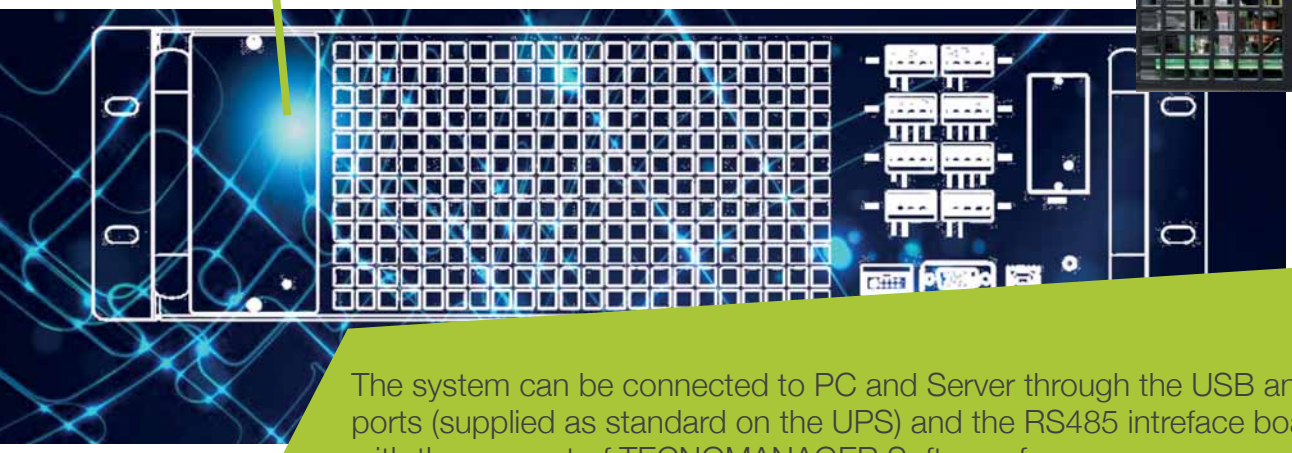
HI EFFICIENCY

The Power Modules, the Battery Modules, the STS Modules, and the Interconnection Systems have been designed and made using premium quality components. Such components are checked applying **Advanced Technology Systems** so that the EVO DSP PLUS MODULAR HE UPS can reach an efficiency level above 96.5%.

FULL ADVANCED COMMUNICATION SYSTEM

All the cabinets for the EVO DSP PLUS MODULAR HE UPS come equipped with a full communication interface system: USB, RS232, EPO (emergency power off) and a smart slot to integrate optional interface boards such as RS485, SNMP or Dry Contact.

An Extra Communication Slot may be added with programmable input/output contacts, connections for temperature detecting sensors for any external battery cabinets, and another smart slot to install any additional RS485, SNMP or Dry Contact interface boards.



The system can be connected to PC and Server through the USB and RS232 ports (supplied as standard on the UPS) and the RS485 intreface board (optional) with the support of TECNOMANAGER Software free download from www.tecnoware.com.

TECNOManager
UPS Management Software

The SNMP interface board (optional) instead allows the connection with BMS systems and LAN networks. The related software is supplied as standard with the interface board.

UPS EVO DSP PLUS MODULAR HE

POWER FACTOR 1

Power Module

Code	FGCEVDPM20TT	FGCEVDPM30TT
Power module capacity	20 KVA - 20 KW	30 KVA - 30 KW
Power Factor	1	
Dimensions WxHxD	44x13,2x65 cm (3U)	
Input		
Nominal Voltage	360Vac/380Vac/400Vac/415Vac (3Ph+N)	
Output		
Nominal Voltage	360Vac/380Vac/400Vac/415Vac (3Ph+N)	
Battery		
Nominal Voltage	+/- 240Vdc (12Vdc x 40 pcs)	
Maximum Charging Current	6A	8A

20 KW Power Module

30 KW Power Module

Battery Module

Battery Module

Code	FBBEVDPM120/07	FBBEVDPM120/09	FBBEVDPM120/11
Battery number		10 pcs	
Battery type	12V 7,2Ah	12V 9Ah	12V 11Ah
Dimensions WxHxD		10,7x15,5x73,5 cm	
Weight	22 Kg	26 Kg	31 Kg

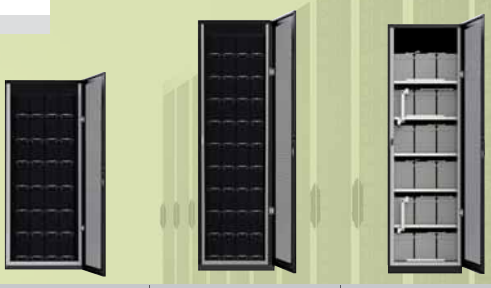
Module 20/30 KW Cabinet

Code	FGCEVDPM30B90K	FGCEVDPM30B120K	FGCEVDPM30B180K	FGCEVDPM42B120K	FGCEVDPM42B210K	FGCEVDPM42B300K
Height	30U	30U	30U	42U	42U	42U
STS Capacity	90 KW	120 KW	180 KW	120 KW	210 KW	300 KW
Type of installable UPS Module	30 KW or 20 KW					
Max. number of installable UPS Module	3	4	6	4	8	10
Battery Modules layers (4 Battery Modules each layer)	3 (12 Modules)	-	-	5 (20 Modules)	-	-
Max. capacity of installing 20KVA Module	60 KW	80 KW	120 KW	80 KW	160 KW	200 KW
Max. capacity of installing 30KVA Module	90 KW	120 KW	180 KW	120 KW	210 KW (If installed with 8 pcs, 1 is for redundancy)	300 KW

HIGH MTBF and LOW MTTR

Module 20 KW Cabinet

Code	FGCEVDPM30A80K	FGCEVDPM30A120K	FGCEVDPM42A200K
Height	30U	30U	42U
STS Capacity	80 KW	120 KW	200 KW
Type of installable UPS Module		20 KW	
Max. number of installable UPS Module	4	6	10
Battery Modules layers (4 Battery Modules each layer)		-	
Max. capacity of installing HV 20KVA Module	80KW	120KW	200KW



Battery Cabinet

Code	FBBEVDPM30U480A	FBBEVDPM42U480A	FBBEVDPM42U480B
Height	30U	42U	42U
Maximum Battery Module installable	28 (to order separatly)	40 (to order separatly)	-
Battery Type and number	-	-	40 x 12V 100Ah (to order separatly)
Dimensions WxHxD	60x147,5x110 cm	60x201x110 cm	64,7x201x110 cm
Weight	135 Kg (without Battery Module)	200 Kg (without Battery Module)	221 Kg (without Battery)

Alta Qualità Italiana

TECNOManager UPS Management Software

TECNOWARE

REFURBISHED COMPONENTS

RoHS COMPLIANT

CE

FPUEVDPM19AEN

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