

Use

Local Area Network (LAN), Data Centers

Protection

- Blackout
- Dynamic Undervoltage
- Dynamic Overvoltage
- Undervoltage
- Overvoltage
- Lightning (UPS + surge discharger upstream)
- Voltage Surge
- Frequency Variation
- Voltage Distortion
- Voltage Harmonic

Main specifications

- Multifunctional LCD Display
- On-Line Double Conversion Technology without transformer (VFI-SS-111)
- Rectifier realized by IGBT technology
- Active PFC Circuit (0.99)
- Wide input voltage tolerance
- Compatible with Generators
- EPO (Emergency Power Off)
- Output voltage and frequency can be regulated from the front panel
- Battery charging system controlled by microprocessor
- Static Bypass
- RS232 and USB communication port
- Intelligent slot for SNMP or Dry Contact card
- High efficiency and low operating cost
- UPS Management Software TecnoManager compatible with Windows, Mac OS X (up to version 10.8), Unix, Linux, ecc

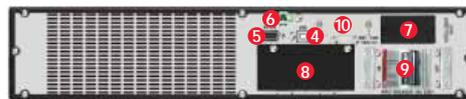
HE HIGH EFFICIENCY
 UPS high efficiency, calculated mode double conversion 100% of load, according to standard 62040-3:2011

DSP
 The UPS EVO DSP Rack Tower are controlled by Digital Signal Processor (DSP) which optimizes the machine operation in any conditions permitting a complete and easy programming.

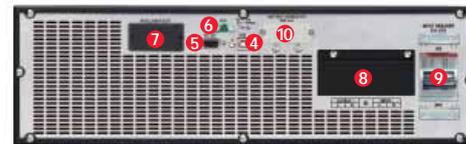
ECO POWER SYSTEM
 The UPS range EVO DSP Rack Tower is designed in accordance with the highest environment protection standards. The high efficiency and low harmonic inputs guarantee the uppermost respect for the environment.



Details



UPS EVO DSP RM 6.0



UPS EVO DSP RM 10.0

- 1 - LCD
- 2 - LED status lights
- 3 - Multifunction button
- 4 - USB port
- 5 - RS232 port
- 6 - EPO connector
- 7 - Slot for SNMP or Dry Contact
- 8 - Input/output Terminal Box
- 9 - Mains switch
- 10 - Battery Box connector



19" Rack cabinet positioning

UPS EVO DSP MM RM

6-10

ON LINE MM

Specifications

Modello UPS	EVO DSP MM 6.0 RACK MOUNT	EVO DSP MM 10.0 RACK MOUNT
Codice	FGCEVD6MM3RM/00	FGCEVD10MM3RM/00
Nominal Power	6 KVA	10 KVA
Active power	4,8 KW	8 KW
Power factor	0,8	
Technology	On-Line Double Conversion transformerless (VFI-SS-111)	
Cooling	Fan cooling	
Audible noise	< 48 dBA a 1 m	
Dimension (UPS) WxHxD	43,8x8,8x50 cm (2U)	43,8x13,3x58 cm (3U)
Dimension (with packing) WxHxD	59x22x71 cm	59x26x78,5 cm
Weight	15 Kg	18 Kg
Equipped with	1 serial cable, Tecnomanager software and 2 metal handle for 19" Rack cabinet mounting	
Input		
Number of phases	1Ph+N	
Nominal voltage	208Vac/220Vac/230Vac/240Vac	
Input voltage range	176Vac-300Vac from 50% to 100% load, 110Vac-300Vac from to 50% load	
Nominal frequency	50/60 Hz (selectable)	
Input frequency range On-Line mode	±7%	
Input power factor	0,99	
Output		
Number of phases	1Ph+N	
Nominal voltage	208Vac/220Vac/230Vac/240Vac	
Voltage Regulation at %100 linear load (On-Line and Battery mode)	±1%	
Voltage THD	<3% (linear load), <6% (non-linear load)	
Crest factor	3:1	
Frequency	50/60 Hz (selectable)	
Frequency stability	±0,1 Hz	
Inverter waveform	Sinewave	
Overload capability (Line mode)	110% for 10 minutes, 130% for 1 minute, >130% for 1 second	
Overload capability (Battery mode)	110% for 30 seconds, 130% for 10 seconds, >130% for 1 second	
Efficiency	94%, calculated in double conversion mode at 100% load according to standard 62040-3: 2011	
Transfer time	0 ms (On-Line)	
Output connections	Terminal block	
Bypass		
Number of phases	1Ph+N	
Nominal voltage	208Vac/220Vac/230Vac/240Vac	
Voltage range	Low threshold 110Vac-209Vac (selectable) - High threshold 231Vac-276Vac (selectable)	
Battery (fitted inside the external Battery Box)		
Batteries number	16 (inside the external Battery Box, for UPS operation)	
Battery charge time (typical)	6-8 hours	
Nominal voltage	192Vdc	
Extended autonomy	External Battery Box (optional)	
Interfacing		
Interface (communication port)	RS232 and USB	
EPO	Yes	
Dry contact interface	Yes (optional)	
Software	TecnoManager, downloadable free from www.tecnoware.com (compatible with WINDOWS, UNIX, LINUX, Mac OS X up to version 10.8 compatible, ecc.)	
SNMP interface	SNMP internal (compatible with WINDOWS, UNIX, LINUX, ecc.) - optional	
Environmental specification		
Storage temperature	From -15 to 40 °C (for UPS with battery inside, see "Storage of batteries in UPS and Battery Box" graphic)	
Working temperature	From 0 to 40 °C (recommended from 20 to 25 °C, for longer battery life see "Battery life in service" graphic)	
Humidity	< 95% without condensation	
Maximum altitude	3000 m	
IP protection	IP20	
Certifications	CE (standards: Low Voltage Directive IEC EN 62040-1; EMC Directive IEC EN 62040-2; classification IEC EN 62040-3)	
Warranty		
Standard	12 months electronic parts - After registration on www.tecnoware.com	
Extensions	Optional	
Customized contracts	Optional	

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Accessories

Model	Code
Bypass Box for Evo Dsp MM Rack Mount 6.0 and 10.0	FGCBYP10MMRM
Dry Contact for Evo Dsp MM	FGCEVODSDRY3
SNMP for Ups Evo Dsp MM	FGCNETAG7
Kit for Rack UPS installation	FGCKITEVORT

UPS EVO DSP MM RM BATTERY BOX

Main specifications

- Internal battery charger on every unit
- Units can be expanded infinitely
- Batteries with thermal circuit protection
- Easy connection to UPS
- Rack format 19", height 3U
- Easy maintenance



Details

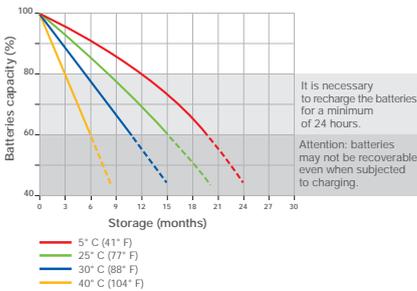


- 1 - Thermal protection for battery charger circuit
- 2 - Power socket for the battery charger circuit
- 3 - Thermal switch for battery circuit
- 4 - Connector for the UPS Battery Box connection
- 5 - Extra Battery Box connector

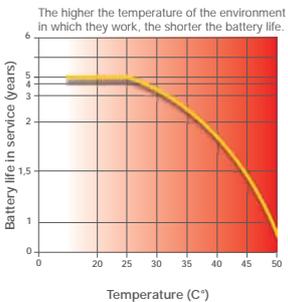


19" Rack cabinet positioning

Storage of batteries in UPS and Battery Boxes



Battery life in service



Specifications

Model	BATTERY BOX FOR EVO DSP MM 6.0-10.0 RM		
Code	FBBEVDR192/07	FBBEVDR192/09	FBBEVDR192/11
Dimension (Box) WxHxD	43,8 x 13,3 x 58 cm (3U)		
Dimension (with packing) WxHxD	59 x 26 x 78,5 cm		
Weight	49 Kg	53 Kg	56 Kg
Equipped with	Battery charger power cable, battery cable to connect UPS to Battery Box, 2 metal handle for 19" Rack mounting		
Battery			
Type	Lead acid, sealed, maintenance free		
Batteries number	16		
Nominal battery voltage	240Vdc		
Battery specification	12Vdc - 7,2Ah	12Vdc - 9Ah	12Vdc - 11A
Internal battery charger			
Nominal input voltage	230Vac		
Nominal input frequency	50/60Hz		
Nominal voltage	274Vdc		
Max charging current	0,7A	0,9A	1,1A
Protection			
Battery charge input	Thermal fuse		
Battery circuit	Magnetothermic switch		
Environmental specification			
Storage temperature	From -15 to 40 °C (for Battery Box with battery inside, see "Storage of batteries in UPS and Battery Box" graphic)		
Working temperature	From 0 to 40 °C (recommended from 20 to 25 °C, for a correct battery use see "Battery life in service" graphic)		
Humidity	< 95% without condensation		
Maximum altitude	3000 m		
IP protection	IP20		
Certifications	CE		
Warranty			
Standard	12 months electronic parts and 12 months batteries - After registration on www.tecnoware.com		

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