

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

- Convertible format (Rack 19" or Tower) with adjustable 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
- Hot Swap Battery
- 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
- Easy installation and maintenance
- UPS Management Software
TecnoManager compatible with Windows, Mac OS X (up to version 10.8), Unix, Linux, ecc

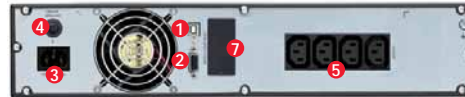
HE HIGH EFFICIENCY
UPS high efficiency, calculated mode double conversion 100% of load, according to standard 62040-3:2011

DSP
The UPS EVO DSP PLUS 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 PLUS is designed in accordance with the highest environment protection standards. The high efficiency and low harmonic inputs guarantee the uppermost respect for the environment.



EVO DSP MM 1.3 Rack Tower HE



EVO DSP MM 2.6 Rack Tower HE



EVO DSP MM 4.0 Rack Tower HE

Details

- 1 - USB port
- 2 - RS232 port
- 3 - Input socket
- 4 - Input thermal protection
- 5 - Output sockets
- 6 - Output terminal block
- 7 - Interface slot for SNMP or Dry Contact
- 8 - Connector for extra Battery Box



19" Rack cabinet positioning

UPS EVO DSP MM RT

1.3-2.6-4.0

ON LINE MM

Specifications

UPS Model	EVO DSP MM 1.3 RACK TOWER	EVO DSP MM 2.6 RACK TOWER	EVO DSP MM 4.0 RACK TOWER
Code	FGCEVD1303MMRT	FGCEVD2603MMRT	FGCEVD4003MMRT
Nominal power	1.300 VA	2.600 VA	4.000 VA
Active power	910 W	1.820 W	2.800 W
Power factor		0,7	
Technology	On-Line Double Conversion transformerless (VFI-SS-111)		
Cooling	Fan cooling		
Audible noise	< 45 dBA at 1 m		
Positioning	Into 19" rack (2U), or Tower positioning		
Dimension (UPS) WxHxD	43,8x8,8x28 cm	43,8x8,8x38 cm	43,8x8,8x60 cm
Dimension (with packing) WxHxD	60x24x43 cm	60x24x53 cm	60x24x67 cm
Weight	12 Kg	19 Kg	29 Kg
Equipped with	1 power cable, 2 output cables (IEC type), 2 plastic pedestals for Tower positioning, 2 metal handle for 19" Rack mounting		
Input			
Number of phases		1Ph+N	
Nominal voltage		208Vac/220Vac/230Vac/240Vac	
Input voltage range		110-300Vac	
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 (selectable)	
Static voltage Regulation at %100 linear load (On-Line and battery mode)		±1%	
Voltage THD at rated linear load		<2% (linear load), <8% (non-linear load)	
Crest factor		5:1	
Frequency		50/60 Hz (selectable)	
Free running frequency		±0,2 Hz	
Inverter waveform		Sinewave	
Overload capability		110% only audible warning, 110-130% for 30 sec, >130% for 100 ms	
Efficiency		94%, calculated in double conversion mode to 100% load according to standard 62040-3: 2011	
Transfer time		0 ms (On-Line)	
Outlets	8 (IEC 320 C13 type)		6 (IEC 320 C13 type) + 1 (IEC 320 C19 type)
Bypass			
Number of phases		1Ph+N	
Nominal voltage		208Vac/220Vac/230Vac/240Vac	
Voltage range		110-300Vac	
Battery			
Type		Lead acid, sealed, maintenance free	
Batteries number	2 (internal)	4 (internal)	6 (internal)
Battery charge time (typical)		6-8 hours	
Nominal battery voltage	24Vdc	48Vdc	72Vdc
Battery specification		12Vdc - 9Ah	
Backup time (Typical)		10 min	
Estensioni autonomia			External Battery Box (optional)
Interfacing			
Interface (communication port)		RS232 and USB	
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 module (compatible with WINDOWS, UNIX, LINUX, ecc.) - optional		
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 (Standards: Low Voltage Directive IEC EN 62040-1; EMC Directive IEC EN 62040-2; classification IEC EN 62040-3)		
Warranty			
Standard	24 months electronic parts and 24 months batteries - After registration on www.tecnoware.com		
Extensions	Optional		

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Accessories

Model	Code
Dry Contact per UPS Evo DSP MM	FGCEVODSDRY3
Internal SNMP for UPS Evo DSP MM	FGCNETAG7
Kit 2 sledges for Rack UPS installation	FGCKITEVORT

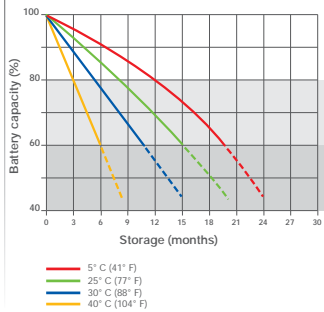
UPS EVO DSP MM RT BATTERY BOX

Main specification

- Internal battery charger on every unit
- Units can be expanded infinitely
- Batteries with thermal circuit protection
- Easy connection to UPS
- Convertible format (Rack 19" or Tower)
- Easy installation and maintenance



UPS (with batteries) storage



It is necessary to recharge the batteries for a minimum of 24 hours.

Attention: batteries may not be recoverable even when subjected to charging.

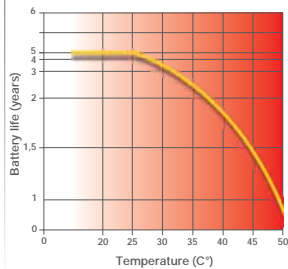
Details



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

UPS Battery life in operating conditions

The higher is the temperature of the environment in which the UPS works, the shorter is the battery life.



Posicionamiento en armario 19" Rack

UPS EVO DSP MM RT

BATTERY BOX

ON LINE MM

Specifications

Model	BATTERY BOX FOR EVO DSP MM 4.0 RT	
Code	FBBEVD4003RT/09	FBBEVD4003RT/18
Positioning	Into 19" Rack cabinet (2U) or Tower positioning	
Dimension (Box) WxHxD	43,8x8,8x68 cm	
Dimension (with packing) WxHxD	59x26x85 cm	
Weight	30 Kg	43 Kg
Equipped with	Battery charger power cable, battery cable to connect UPS to Battery Box, 2 plastic pedestals for Tower positioning, 2 metal handle for 19" Rack mounting	
Battery		
Type	Lead acid, sealed, maintenance free	
Batteries number	6	12
Nominal battery voltage	72Vdc	
Battery specification	12Vdc - 9Ah	
Internal battery charger		
Nominal input voltage	230Vac	
Nominal input frequency	50/60Hz	
Nominal charging voltage	82,2Vdc	
Max charging current	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	24 months electronic parts and 24 months batteries - After registration on www.tecnoware.com	

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