WIDEPOWER®

electronics and energy solutions

UNINTERRUPTIBLE POWER SUPPLY

WTB-M

POWER RANGE

10-20 kVA

THREE-PHASE INPUT AND SINGLE-PHASE OUTPUT

3:1

Compact tower solution, highly reliable and available in three power levels. Ideal for full protection of critical equipment in medium-scale systems. Maximum efficiency and guaranteed service continuity.

- ✓ **Output power factor 1.0**
- ✓ **Online Double Conversion technology**
- ✓ **Filtered input voltage with power factor correction**
- ✓ **Fully digital DSP control**

www.widepower.eu

WTB-M

UNINTERRUPTIBLE POWER SUPPLY

POWER RANGE

10-20 kVA

With cutting-edge technology and a compact, elegant design, the WTB-M range stands out from other solutions on the market for its efficiency and quality.

- Industry e Automation
- Corporate Offices
- Telecommunications
- Medical Equipment & Clinical/Hospital IT
- Small and Medium Data Centers
- Security Systems
- Educational Infrastructure

MAIN FEATURES

- Online Double Conversion technology with pure sine wave output
- Filtered input voltage with Active Power Factor Correction (APFC)
- Input power factor up to 0.99
- Output power factor 1.0
- Fully digital control via DSP microprocessor
- Expandable backup time (connection of external battery modules)
- Protection against short circuit, overloads, under and overvoltage
- Dual-input design, supporting independent bypass
- Linear input derating at low voltage, reducing battery discharge time and extending battery lifespan
- Cold Start Technology
- Advanced Battery Management System (ABM) with intelligent management, automatic equalization and float control, improving charger reliability and extending battery life
- Adjustable load transfer time, compatible with generator operation
- Intuitive and easy-to-use LCD display
- Selectable output voltage adjustable via LCD panel
- Advanced multi-platform communication ports for UPS management and monitoring
- Emergency Power Off (EPO)
- Self-regulating cooling fans based on load and temperature
- Communication ports: RS232 / RS485 / USB / Dry Contacts / SNMP (optional)

Online
Double Conversion

ECO
High-Efficiency

PF
In / Out

BMS
Battery

Expandable
Runtime Extensions

WTB-M

UNINTERRUPTIBLE POWER SUPPLY

COMMUNICATION / MANAGEMENT

Front panel (LCD)
Displays vital UPS operating information and allows control of key functions.

User-Friendly Communication and Management Software

Provides real-time information on electrical and operational parameters.

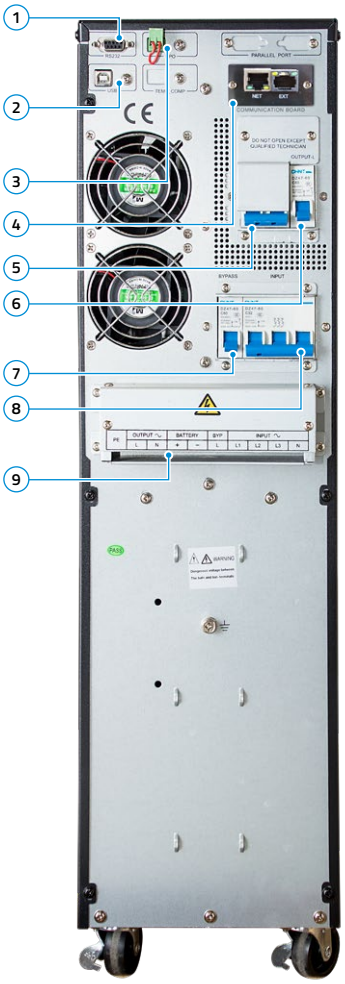
Enables viewing and export of logs and events, as well as historical incident records.

Allows automatic shutdown of protected equipment.

Remote management of main functions.

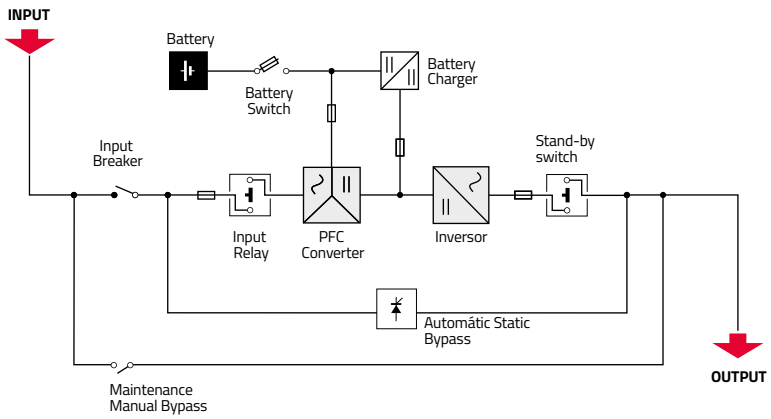
Communication Module
When configured, the software performs automatic shutdown of PCs and servers protected by the unit.

REAR PANEL VIEW



1. RS232 Serial Port
2. USB Port
3. EPO (Emergency Power OFF)
4. Communication Board (opcional)
5. Manual Bypass
6. Output Breaker
7. Bypass Breaker
8. Input Breaker
9. Cable Input/Output

OPERATING DIAGRAM



WTB-M

MODEL	WTB-M 10k	WTB-M 15k	WTB 20k
POWER	10kVA / 10kW	15kVA / 15kW	20kVA / 20kW
INPUT			
Nominal Voltage	380 / 400 / 415Vac Three-Phase with accessible Neutral (3Φ + N + PE)		
Nominal Frequency	50/60 Hz		
Frequency Range	40 ~70Hz		
Power Factor	≥0.99		
Total Harmonic Distortion (THDi)	≤5%		
Bypass Voltage Range	-40% ~ +15% (selectable)		
Input Connection	Terminals		
OUTPUT			
Nominal Voltage	220V/230V/240Vac Single-Phase (1Φ + N + PE) (selectable)		
Voltage Precision	±1%		
Frequency	50Hz/60Hz in normal mode; 50Hz/60Hz ±0.1Hz in battery mode		
Waveform	1		
Power Factor	Pure Sine Wave		
Crest Factor	3:1		
Total Harmonic Distortion (THDv)	≤1% linear load / ≤3% non-linear load		
Inverter Overload Capacity	105% ~ 110%: Transfer to bypass in 10 min 110% ~ 125%: Transfer to bypass in 1 min >126%: Transfer to bypass in 30 s and turns the output off in 1 min		
Efficiency	≥95% in Normal mode ≥98% in ECO mode		
Output Connection	Terminals		
BATTERIES			
Type	12V/9Ah, VRLA maintenance-free		
Typical Backup Time	192/240Vdc (selectable)		
Backup Time Expansion	Enabled through connection of external battery modules		
Typical Recharge Time	4-6h		
SYSTEM AND COMMUNICATIONS			
Display	LCD + LED		
Alarms and Protection	Short circuit, power failure, battery mode, low battery voltage, fan failure, overload		
Interfaces	EPO / RS232 / USB / RS485 Modbus (optional) / Dry contacts (optional) / SNMP (optional)		
Maximum number of parallel units	4		
PHYSICAL AND ENVIRONMENTAL CONDITIONS			
Dimensions (WxDxH) (mm)	191 x 495 x 711	191 x 495 x 515	
Weight (kg)	64	27 (without batteries)	
Operating Temperature	0 ~ 40°C		
Relative Humidity	20 - 90% (non-condensing)		
Noise Level	≤58dB (1m)		
Heat Dissipation	1595 BTU/hr	2245 BTU/hr	2993 BTU/hr
Protection Level	IP20		
Standards	European Directives: LVD 2014/35/UE | EMC 2014/30/EU EN IEC 62040-1 | EN IEC 62040-2 | EN IEC C62040-3 (VFI SS 111)		