WIDEPOWER®

electronics and energy solutions

UNINTERRUPTIBLE POWER SUPPLY

MKT

POWER RANGE

10-40 kVA

THREE-PHASE INPUT AND OUTPUT

3:3

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

- ✓ **Output power factor 1.0**
- ✓ **Online Double Conversion technology**
- ✓ **5” Color Touchscreen**
- ✓ **Filtered input voltage with power factor correction**
- ✓ **Fully digital dual-core DSP control**

www.widepower.eu

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UNINTERRUPTIBLE POWER SUPPLY

POWER RANGE

10-40 kVA

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

- Information Technology and Data Centers
- Healthcare and Medical Equipment
- Industry and Automation
- Mobility and Transportation
- Education and Academic Environments
- Telecommunications and Network Hubs
- Commercial Infrastructure and Retail
- Banking and Finance
- Public Administration and Essential Services

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
- Advanced dual-core DSP control and 3-level technology
- System efficiency improved to 96%, energy-saving rate doubled
- Expandable backup time (connection of external battery modules)
- Protection against short circuit, overloads, under and overvoltage
- Dual-input design with independent bypass support
- 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
- 5” LCD color touchscreen, with a user-friendly and accessible interface
- 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
- Insulating coating technology allows the UPS to operate in harsher environments for extended periods
- Flexible battery configurations
- Communication ports: RS232 / RS485 / USB / Dry Contacts / SNMP (optional)
- Optional Wi-Fi card, GPRS card and SMS alarms

Online Double Conversion

2CORE DSP Control

BMS Battery

Expandable Runtime Extensions

Insulated Coating Tech

MKT

UNINTERRUPTIBLE POWER SUPPLY

COMMUNICATION / MANAGEMENT

Touchscreen Front Panel
Displays vital UPS operating information and allows control of key operations.

User-Friendly Communication and Management Software

Displays real-time information on the main electrical and operating parameters.

Viewing and export of logs and events, as well as a record of historical occurrences.

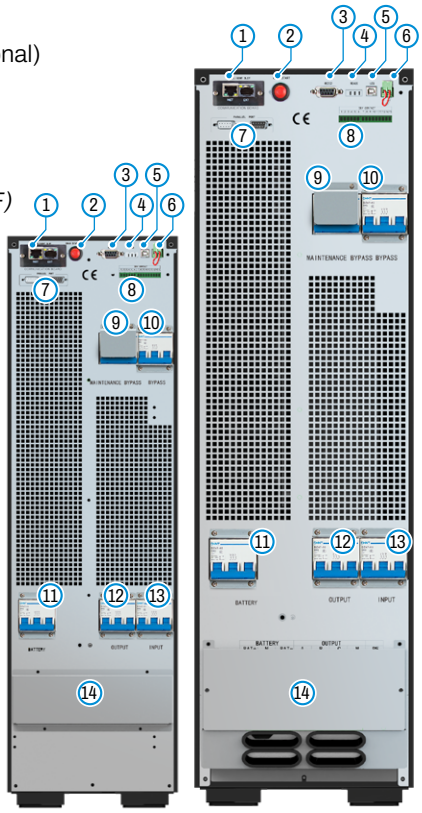
Allows automatic shutdown of protected equipment.

Remote management of key functions.

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

REAR PANEL VIEW

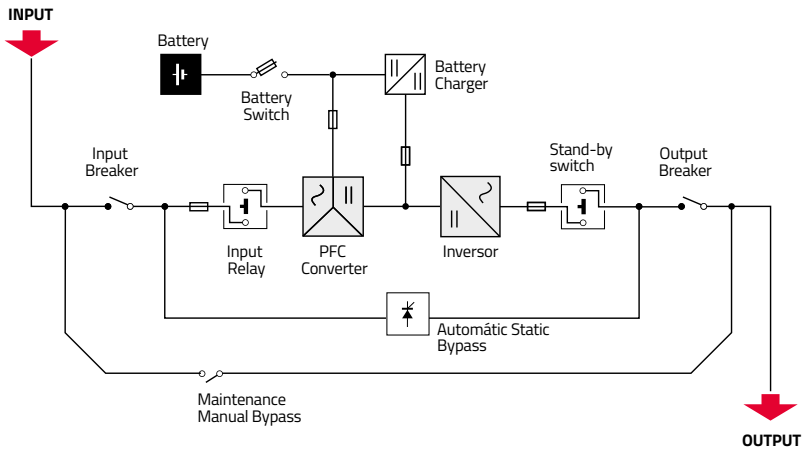
1. Communication Board (opcional)
2. Cold Start
3. RS232 Serial Port
4. RS485 Serial Port
5. USB Port
6. EPO *(Emergency Power OFF)*
7. Parallel Port
8. Dry Contact
9. Maintenance Bypass
10. Bypass Breaker
11. Battery Breaker
12. Output Breaker
13. Intput Breaker
14. Cable Entry/Exit



MKT 10-30k
WxDxH: 250 x 772 x 938 (mm)

MKT 40k
WxDxH: 350 x 800 x 1280 (mm)

OPERATING DIAGRAM



MKT

MODEL	MKT 10k	MKT 15k	MKT 20k	MKT 30k	MKT 40k
POWER	10kVA / 10kW	15kVA / 15kW	20kVA / 20kW	30kVA / 30kW	40kVA / 40kW

INPUT

Nominal Voltage		380V / 400V / 415Vac (3Φ + N + PE)
Nominal Frequency		50/60Hz (auto-detection)
Voltage Range		304V~478Vac (Φ-Φ), Full Load 228V~304Vac (Φ-Φ), load decreases linearly according to the minimum phase voltage
Frequency Range		40 ~70Hz
Maximum Load Power Factor		≥0.99
Total Harmonic Distortion (THDi)		≤3% (linear load)
Bypass Voltage Range		-40% ~ +25% (adjustable)
Bypass Frequency Range		Selectable: ±1Hz, ±3Hz, ±5Hz
Input Connection		Terminals

OUTPUT

Nominal Voltage		220V / 230V / 240V (Φ-N) | 380V / 400V / 415Vac (selectable) (3Φ+N+PE)
Voltage Precision		±1% (Linear load)
Frequency		50Hz/60Hz in normal mode | 50Hz/60Hz ±0.1Hz in battery mode
Sync Range		Selectable: ±0.5Hz ~ ±5Hz, typically ±3Hz
Waveform		Pure Sine Wave
Power Factor		1
Crest Factor		3:1
Total Harmonic Distortion (THDv)		≤1% @ Full linear load | ≤3% @ Full non-linear load according to IEC/EN62040-3
Overload Capacity	Inverter Mode	<110%, 60 min | 110%~125%, 10 min | 125%~150%, 1 min | >150%, 200 ms
	Bypass Mode	125% continuous operation | 125%~130%, 10 min | 130%~150%, 1 min | 150%~400%, 1 s | >400%, < 200 ms
Efficiency		≥96% in Normal mode | ≥98,5% in ECO mode
Output Connection		Terminals

BATTERIES

Type			VRLA maintenance-free			
DC Voltage			Typically: ±240V, ±120V ~ ±240V (selectable)			
Backup Time Expansion			Enabled through connection of external battery modules			
Maximum Recharge Current			10 A			15 A
Typical Recharge Time			4 - 6h			

SYSTEM AND COMMUNICATIONS

Display		5'' Color Touchscreen
Alarms and Protection		Short circuit, power failure, battery mode, low battery voltage, fan failure, overload, failure, high temperature
Interfaces		RS232 / USB / EPO / dry contacts | Optionals: SNMP / RS485 / Modbus / Wi-Fi / GPRS / Parallel Kit
Transfer Time (bypass – inverter)		Synchronized Transfer: 0 ms
Max. number of parallel units		4

PHYSICAL AND ENVIRONMENTAL CONDITIONS

Dimensions (WxDxH) (mm)	250 x 772 x 938				350 x 800 x 1280
Weight (kg)	115	155	165	215	300 / 116 (Without Bat.)
Operating Temperature	0 ~ 40°C				
Relative Humidity	0 - 95% (non-condensing)				
Noise Level	≤55dB (1m)			≤62dB (1m)	
Heat Dissipation	1642 BTU/hr	2355 BTU/hr	3120 BTU/hr	4517 BTU/hr	6096 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)				