WIDEPOWER®

electronics and energy solutions

UNINTERRUPTED POWER SUPPLY

COMBO | CPSS

POWER RANGE

10-200 kVA

THREE-PHASE INPUT AND OUTPUT

3:3

CPSS (Central Power Supply System) solution in compliance with the EN 50171 standard, with an inductance filter integrated at the input and a galvanic isolation transformer integrated at the output.

Ideal for critical installations, security systems, hospitals, and industrial facilities.

- ✓ **CPSS compliant with EN 50171**
- ✓ **With an input inductance filter and an output isolation transformer**
- ✓ **IGBT-Based Inverter**
- ✓ **Enhanced Protection**
- ✓ **Dual Input**

COMBO | CPSS

UNINTERRUPTED POWER SUPPLY

POWER RANGE

10-200 kVA

With state-of-the-art technology and a compact, elegant design, the COMBO CPSS range stands out from other market solutions for its high quality and reinforced protection.

The presence of galvanic isolation at the output, combined with EN 50171 compliance (Central Power Supply System), makes it the ideal equipment for the most demanding applications.

Compliant with EN 50171 Standards

EN 50171 compliant

- **Supports 120% of the rated load throughout the entire autonomy period**
- **Battery protection against damage in case of reverse polarity**
- **Battery protection against deep discharge**
- **Battery service life of 10 years**
- **Fast battery charging: 80% capacity reached in just 12 hours**
- **IP20 protection in accordance with EN 60598-1**

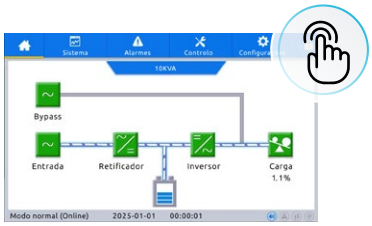
KEY FEATURES

- CPSS compliant with EN 50171
- Input inductance filter and galvanic isolation transformer at the output.
- IGBT-Based Inverter
- Enhanced Protection
- Online Double Conversion Technology with pure sinewave output
- Filtered input voltage with Active Power Factor Correction (APFC)
- Input power factor up to 0.99
- Output power factor 0.9
- Advanced DSP (Digital Signal Processor) control technology
- High efficiency, up to 98%
- Expandable autonomy (connection of external battery modules)
- Protection against short circuits, overload, under and overvoltage
- Dual input design, supporting independent bypass
- Linear derating at low input voltage, reducing battery discharge times and extending battery life
- Cold Start Technology
- Advanced Battery Management (ABM) system with intelligent control, automatic equalization and float charging, improving charger reliability and extending battery lifespan
- Adjustable load transfer time, compatible with generator operation
- 7” Touchscreen LCD in Portuguese, with a user-friendly interface
- Selectable output voltage, adjustable via the LCD panel
- Advanced multi-platform communication ports for UPS monitoring and management
- Emergency Power Off (EPO) function
- Self-regulating cooling fans depending on load and temperature
- Protective coating technology allowing UPS operation in harsh environments for extended periods
- Flexible battery configurations
- RS232 / RS485 / Dry contacts communication ports
- Optional SNMP, Wi-Fi, and GPRS cards, plus SMS alarms

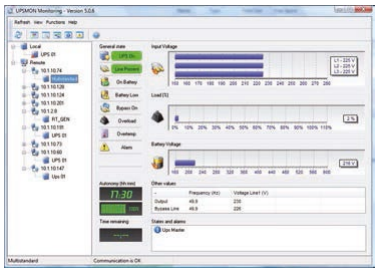
COMBO | CPSS

UNINTERRUPTED POWER SUPPLY

COMMUNICATION / MANAGEMENT



Touchscreen Front Panel
Displays critical UPS operating information and allows control of key functions.



User-Friendly Communication and Management Software

Real-time display of main electrical and operational parameters.

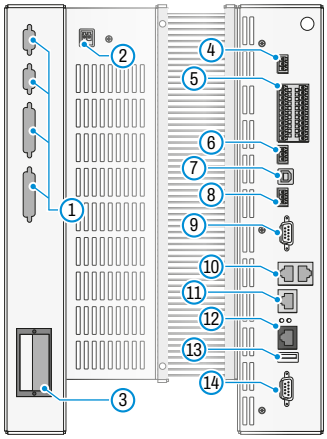
Visualization and export of logs, events, and historical records.

Enables 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.

INTERFACES



1. Free slots for optional cards
2. RS485-2 port
3. SNMP communication card
4. EPO *(Emergency Power OFF)*
5. Dry contacts (input)
6. Dry contacts (output)
7. USB-1 port
8. RS485-1 port
9. RS232 port
10. RS485/CAN (BMS) port
11. Porta de Rede
12. Battery Temperature (input)
13. USB-2 port
14. HMI port

STANDARD LAYOUT
(may vary between models)

Online
Double Conversion

DSPi
Precise Control

BMS
Battery

Insulated
Coating Tech

COMBO | CPSS

MODEL	COMBO 10k	COMBO 15k	COMBO 20k	COMBO 30k	COMBO 40k	COMBO 60k	COMBO 80k	COMBO 100k	COMBO 120k	COMBO 160k	COMBO 200k
NOMINAL POWER	10kVA	15kVA	20kVA	30kVA	40kVA	60kVA	80kVA	100kVA	120kVA	160kVA	200kVA
Active Power	9kW	13.5kW	18kW	27kW	36kW	54kW	72kW	90kW	108kW	144kW	180kW
Active power with EN 50171 compliance	7.5kW	11,25W	15kW	22,5kW	30kW	45kW	60kW	75kW	90kW	120kW	150kW

INPUT

Nominal Voltage	380V / 400V / 415Vac (3Φ+N+PE)	
Nominal Frequency	50/60Hz (auto-detection)	
Voltage Range	285V~475Vac (Φ-Φ), Full Load	304V~456Vac (Φ-Φ), Full Load
Frequency Range	40~70Hz	45~65Hz
Power Factor	≥0,99	
Total Harm. Distortion (THDi)	≤3% (linear load)	
Bypass Voltage Range	±20% (selectable)	
Bypass Frequency Range	±5Hz	
Input Connection	Terminals	

OUTPUT

Nominal Voltage	380 / 400 / 415 Vac (selectable) (3Φ+N+PE)	
Voltage Precision	±1% (linear load)	
Frequency	50/60Hz in normal mode | 50/60Hz ± 0.1Hz in battery normal	
Waveform	Pure Sine Wave	
Power Factor	0.9	
Crest Factor	3:1	
Total Harmonic Distortion (THDv)	≤1% @ full linear load | ≤5% @ full non-linear load with IEC/EN62040-3 compliance	≤2% @ full linear load; ≤5% @ full non-linear load with IEC/EN62040-3 compliance
Overload Capacity in Inverter Mode	105%~110%, 60min | 110%~125%,10min | 125%~150%,1min | >150%, 200ms	
Overload Capacity in Inverter Mode (EN 50171)	120% continuous operation (EN 50171)	
Eficiency	93%, ≥98% in ECO mode	94%, ≥98% in ECO mode
Output Connection	Terminals	

BATTERIES

Type	VRLA (Long Life)	
DC Voltage	±360 Vdc (Selectable, 28~32 pcs)	±600 Vdc (Selectable, 48~52 pcs)
Backup Time Expansion	Enabled through connection of external battery modules	

SYSTEM AND COMMUNICATION

Display	LED + 7'' Color Touchscreen
Alarms and Protection	Short circuit / power failure / battery mode / low battery voltage / fan failure / overload / failure / high temperature
Interfaces	RS232 / RS485 / USB / EPO / dry contacts | Opcionals: SNMP/Parallel Kit
Transfer Time (between bypass and inverter)	Synchronized Transfer: 0ms
Max. number of parallel units	6

PHYSICAL AND ENVIRONMENTAL CONDITIONS

Dimensions (WxDxH) (mm)			400 x 800 x 1100			600 x 700 x 1500		700 x 800 x 1700		800 x 860 x 1700	1210 x 860 x 1950
Weight (kg)	158	165	175	210	260	460	590	630	690	790	1135
Operating Temperature	0 ~ 40°C										
Relative Humidity	0 ~ 95% (non-condensing)										
Noise Level	65dB (1m)										
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) | EN 50171										