



PremiumTower CPSS

Standalone three-phase UPS IEC 10 kW to 7.5 MW

PremiumTower CPSS Your partner for robust standby power solutions

Centiel's commitment to excellence in power protection extends to the core of vital safety and emergency response systems. We understand that every second counts when it comes to safety and emergency response. That's why our centralized emergency power systems are designed to meet the highest industry standards, including the globally recognized EN 50171.

Our mission is clear: to provide you with uninterrupted, reliable power for essential life safety systems. From emergency lighting to automatic fire detection, fire suppression systems, smoke removal mechanisms, carbon monoxide detectors, signaling devices, and special protection for high-risk areas, we've got you covered.

With Centiel, you're not just investing in power solutions, you're investing in peace of mind, safety, and reliability. Discover more about PremiumTower CPSS and how Centiel's emergency power solutions can strengthen your security and emergency system

What is it that makes a UPS a CPSS?

The EN 50171 standard applies to systems permanently connected to AC supply voltages not exceeding 1000 V and using batteries as an alternative power source. Technical criteria required to classify a UPS as a CPSS:

Batteries

Batteries used in CPSS electric rescuers must have an expected life of at least 10-12 years.

Overload

The inverters used in the CPSS must be able to withstand a continuous 120% overload.

Charging times

The chargers used must recharge the batteries within 12 hours, starting from a low battery condition.

Housing resistance

The housing of the CPSS must have excellent mechanical strength.

Product highlights

- EN 50171 compliance
- Dual input
- High charge current
- Reverse battery protection
- Continuous 120% overload capacity
- 500% more powerful battery charger
- High power density (up to 415 kW/m2)
- A variety of matching battery cabinets are available
- Internal batteries from 10 kW to 60 kW
- Ease of service



PremiumTower CPSS The power to excel in reliability and performance

Designed to excel in every aspect of critical safety and emergency situations, the PremiumTower CPSS delivers unparalleled performance and peace of mind. Explore its exceptional features:

Unity Power Factor (kVA = kW)

PremiumTower CPSS provides a unity power factor that eliminates the need to oversize the system to support today's power factor corrected loads.

High Battery Charging Current

With the ability to provide up to five times more charging current than a typical standalone, the PremiumTower CPSS reduces total system costs by eliminating the need for external battery chargers.

High Efficiency 96.6% (VFI)

With a best-in-class efficiency of 96.6 % in double conversion mode (VFI), PremiumTower CPSS provides the lowest Total Cost of Ownership.

Dual Input Feed

The PremiumTower CPSS is powered by two independent AC sources to further increase the availability of the installation.

Outstanding Overload Capability

With a 120 % continuous operation in overload conditions, mission-critical applications can be safe in the event of unexpected load demands.

Ultra-Safe Eco Mode

With a 99.4 % efficiency in eco mode operation and an ultrafast reaction time of <1,9 ms, Ultra-Safe Eco mode enables an excellent trade-off between power quality and energy efficiency.

Exceptional Short Circuit Capability

With a short circuit capability of three times the nominal current ($3 \times In$), PremiumTower CPSS is able to clear output circuit protection in milliseconds.

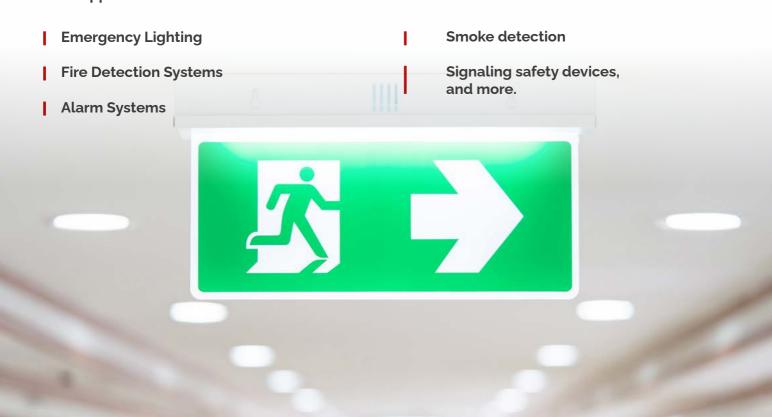
High reliability by design

Three independent power converters increase system reliability and ensure power continuity in the event of a power component failure.

Applications

Designed to ensure an uninterrupted power supply during power outages, our products are not only suitable for emergency lighting needs but also for powering other vital safety elements.

Main applications:



| _ \ | |
|-----|--|
| • | |

| | | | | | UPS-PTo | 30-E-Do | UPS-PT040-E-D0 | UPS-PTo6o-E-Do | |
|-------------------|----------|--------------------------------|--|------------------------|-------------------|------------------|------------------------------|------------------------------|--|
| | | Model | UPS-PT010- 1080-D0 | UPS-PT020- 1080-D0 | UPS-PTo | 30-l160- | UPS-PT040- I160-E0 | UPS-PT060- I160-E0 | |
| Gene- ral Data | | Product name | PremiumTower UPS | | | | | | |
| ge ral [| | Topology/Technology | Online double conv | ersion | | | | | |
| Input | | Input Wiring | 3Ph+N+PE | | | | | | |
| | Mains | Rated Voltage | 380/400/415Vac | | | | | | |
| | | Voltage Range | For loads <100% (-25%, +20%), <80% (-32.5%, +20%), <60% (-35%, +20%) | | | | | | |
| | | Input Frequency | 40-70 Hz | | | | | | |
| | | Total Harmonic Distortion | THDi<3% for linear load, THDi<5% for nonlinear load | | | | | | |
| | | Input Power Factor | 0,99 | | | | | | |
| | | Input Wiring | 3Ph+N+PE | | | | | | |
| | D | Rated Voltage | 380/400/415 Vac | | | | | | |
| | Bypass | Change over tolerance | ±30±10% (Voltage) (According to VFI-SS-111) | | | | | | |
| | | Input Frequency | 50/60 ±2/4% (selectable) | | | | | | |
| | | Rated Voltage | 360-480 Vdc (the nu | ımber of batteries car | n be selecte | d) | | | |
| | | Internal Batteries (79Ah) | I 080:80 | I 080:80 | E External | 1160:160 | E External I160:160 | E External 1160:160 | |
| | Battery | Туре | Lead-Acid/NiCad/Lithium | | | | | | |
| | | Blocks [LA]/Cells[NicAd] | Flexible: 3050 | | | | | | |
| | | Charger (Amp) | 20 | 20 | 40 | | 40 | 40 | |
| | | Output Wiring | 3Ph+N+PE | | | | | | |
| | | Nominal Power [kVA] | 10 | 20 | 30 | | 40 | 60 | |
| | | Nominal Power [kW] | 10 | 20 | 30 | | 40 | 60 | |
| | | Voltage | 380/400/415 Vac±1% | | | | | | |
| ی | | Frequency | Tracking the bypass input (Online Mode); 50/60 Hz±0.1% (Battery Mode) | | | | | | |
| utput | Inverter | Waveform | Sine wave (THDv<2% for linear load; THDv<3% for non-linear load) | | | | | | |
| 0 | | Output Power Factor | 1 | | | | | | |
| | | Efficiency | 96,6% | | | | | | |
| | | Overload Capacity | Inverter: 120% continuous ≥ 120% for 10 min; ≥150% for 1 min Bypass: 135% for long term; <1000% for 100ms | | | | | | |
| | | Short circuit capability | 3 x IN | | | | | | |
| | Bypass | Efficiency | 99,4% | | | | | | |
| | | Operating Temperature | 0-40°C (No power d | erating) | | | | | |
| rent | | Storage Temperature | -40-70°C | | | | | | |
| Environment | | Relative Humidity | | | | | | | |
| Envi | | Maximum Operating Altitude | | | | | | | |
| | | Audible Noise | <65dB | | | | | | |
| | | Dimensions (H x W x D) [mm] | D0 : 1075 x 350 x 85 | 0 | | E0 : 1725 | x 520 x 850 | | |
| r.S | | Weight [Kg] withouth batteries | D 80 | | | E 105 | | | |
| Others | | Colour / Protection Level | RAL 9017 (traffic black) / IP20 | | | | | | |
| - | | Certifications | EN 50171; EN/IEC 62040-1; EN/IEC 62040-2; EN/IEC 62040-3; CE; RoHS | | | | | | |
| | | Communications | Std : 1 x RS232, 2 x Dry In, 1 x Dry Out, 2x Expansion slots. Option : 6 x Dry Output contacts, 4 x Dry Input contacts, Bluetooth, SNMP Slot | | | | | | |

Technical Datasheet - From 80kVa/kW to 250kVA/KW

| | | | UPS-PTo8o- E3o-Fo | UPS-PT100- E30-F0 | UPS-PT120- E30-F0 | UPS-PT160- E30-G0 | UPS-PT200- E30-H0 | | |
|-------------------|----------|--------------------------------|--|----------------------|-------------------------|-----------------------------|-------------------------|----------------------|--|
| | | Model | UPS-PT080- E40-F0 | UPS-PT100- E40-F0 | UPS-PT120- E40-G0 | UPS-PT160- E40-G0 | UPS-PT200- E40-H0 | UPS-PT250- E40-H0 | |
| ne- ata | | Product name | PremiumTower U | JPS | | | | | |
| Gene- ral Data | | Topology/Technology | Online double conversion | | | | | | |
| | | Input Wiring | 3Ph+N+PE | | | | | | |
| | Mains | Rated Voltage | 380/400/415Vac | | | | | | |
| | | Voltage Range | For loads <100% (-25%, +20%) <80% (-32.5% +20%) <60% (-35% +20%) | | | | | | |
| | | Input Frequency | 40-70 Hz | | | | | | |
| | | Total Harmonic Distortion | THDi<3% for linear load, THDi<5% for nonlinear load | | | | | | |
| | | Input Power Factor | 0,99 | | | | | | |
| Input | | Input Wiring | 3Ph+N+PE | | | | | | |
| 드 | _ | Rated Voltage | 380/400/415 Vac | | | | | | |
| | Bypass | Change over tolerance | ±30%±10% (Voltage) (According to VFI-SS-111) | | | | | | |
| | | Input Frequency | 50/60 ±2/4% (sel | ectable) | | | | | |
| | | Rated Voltage | 360-480 Vdc (the | number of bat | teries can be selecte | d) | | | |
| | | Туре | Lead Acid/N Cad/Lithium | | | | | | |
| | Battery | Blocks [LA]/Cells [NicAd] | Flexible: 3050 | E30 Minimun 30 | blocks (flexible from 3 | 0 to 50)/ E40 Minimu | ın 40 Bloks (flexible f | from 40 to 50) | |
| | | Charger (Amp) | TBA | | | | | | |
| | | Output Wiring | 3Ph+N+PE | | | | | | |
| | | Nominal Power [kVA] | 80 | 100 | 120 | 200 | 160 | 250 | |
| | | Nominal Power [kW] | 80 | 100 | 120 | 200 | 160 | 250 | |
| | | Voltage | 380/400/415 Vac | ±1% | | | | | |
| | | Frequency | Tracking the bypass input (Online Mode); 50/60 Hz±0.1% (Battery Mode) | | | | | | |
| Output | Inverter | Waveform | Sine wave (THDv<2% for linear load; THDv<3% for non-linear load) | | | | | | |
| 8 | | Output Power Factor | 1 | | | | | | |
| | | Efficiency | 96,6% | | | | | | |
| | | Overload Capacity | Inverter: 124% continuos ≥ 125% for 10 min; ≥ 150% for 1 min Bypass: 135% for long term; < 1000% for 100 ms | | | | | | |
| | | Short circuit capability | 3 x IN | | | | | | |
| | Bypass | Efficiency | 99,4 % | | | | | | |
| | | Operating Temperature | 0-40°C (No powe | r derating) | | | | | |
| ent | | Storage Temperature | -40-70°C 0%-95% (No condensing) | | | | | | |
| onm | | Relative Humidity | | | | | | | |
| Environment | | Maximum Operating Altitude | 1000 m. Above 1000 m, derating 1% for each additional 100 m | | | | | | |
| | | Audible Noise | <65dB | | | | | | |
| | | Dimensions (H x W x D) [mm] | F0: 1985 x 600 x | G0: | 1985 x 730 x 970 | H0: 1985 x 850 x | ¢ 600 | | |
| SJ: | | Weight [Kg] withouth batteries | - | | | | | | |
| Others | | Colour / Protection Level | TBA / IP20 | | | | | | |
| | | Certifications | EN50171; EN/IEC 62040-1; EN/IEC 62040-2; EN/IEC 62040-3; CE; RoHS | | | | | | |
| | | Communications | Std : 1 x RS232, 2 x Dry In, 1 x Dry Out, 2x Expansion slots. Option : 6 x Dry Output contacts, 4 x Dry Input contacts, Bluetooth, SNMP Slot | | | | | | |





www.centiel.com

