



CPSS 1/1
4000-10000 VA

CPSS 3/3
10-40 kVA



CPSS

EN 50171 compliant CPSS designed to ensure the highest degree of protection in the critical environments of all emergency system installations.

For everyone's peace of mind: designers, retailers, installers and end users.

CPSS single-phase 4000-10000 VA

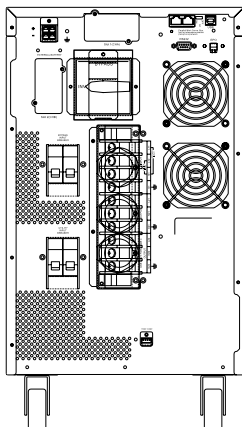
CPSS three-phase 10-40 kVA



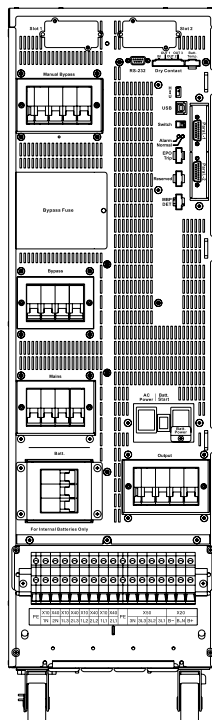
Applications

- Emergency lighting
- Fire alarm systems
- Smoke extraction systems
- Gas and smoke detection systems
- Security alarm systems
- PAV Voice Systems
- Lone Worker Systems

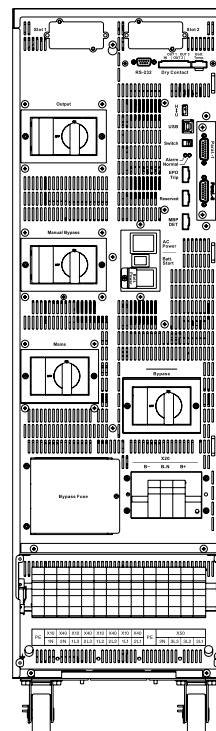
Single-phase
CPSS 4-6 VA
CPSS 8-10 VA



Three-phase
CPSS 10-20 kVA



Three-phase
CPSS 30-40 kVA



CPSS

- **Fully EN 50171 compliant with third party test certificate**, the ZEN CPSS is a real Central Power Supply System that meets all legal requirements for the protection of emergency and safety systems.
- Easy to install: smallest footprint among EN 50171 compliant products.
- Wide variety of audible and visual alarms including: battery polarity reversal, CPSS and battery charger short circuit, power failure, low battery, bypass transfer, CPSS fault.
- Cold start from the battery without mains power.
- Maximum efficiency (up to 98%) and flexibility thanks to the 4 operating modes.
- The single-phase version includes mixed, online and SE modes with separate outputs, while the three-phase version requires optional accessories.
- Dual input and internal manual bypass for simple, completely safe maintenance.
- High overload capacity: delivers up to 120% of the rated power indefinitely.
- Easy and fast connection guaranteed by the terminals, which have been enlarged in the single-phase version.
- Option of internal battery with housing for 40 9Ah batteries for three-phase 10 and 20 kVA models (with optional tray kit only), giving a compact solution for small-load applications.
- Protection against load-side short circuits and battery polarity reversal, without the risk blowing fuses during commissioning, even in the event of reversal.
- Shorter charging time and longer battery life thanks to high charge current with temperature compensation.
- Accurate calculated remaining uptime is shown on the display.
- Hot-swappable batteries: the batteries can be replaced while the CPSS is running.
- Greater flexibility offered by the internal charger that is easy to set from the display.
- Battery life of 10 years.
- Heat and fire resistant IP20 casing that is EN 60598-1 compliant.
- Easily upgradeable firmware.
- RS232, USB and EPO ports built-in, and slots for optional communication cards. Remote on/off available in the single-phase version.



Fully EN 50171 compliant with third party test certificate

Key options

- Cards: SNMP, RS485 ModBus and relay card with dry contacts
- EN 50272-2 compliant battery cabinet

CPSS single-phase

- Additional battery charger for long runtimes

CPSS three-phase

- Parallel kit
- Mixed mode kit

CPSS

CPSS SINGLE-PHASE TECHNICAL DATA SHEET

MODEL		CPSS 4000	CPSS 6000	CPSS 8000	CPSS 10000
POWER	VA	4000	6000	8000	10000
	W	3500	5250	7000	8500
INPUT	Rated voltage*	110 – 280 Vac			
	Frequency	45 – 70 Hz			
	Power factor	>0.99			
	Current distortion (THDi)	<5%			
OUTPUT	Rated voltage	200/208/220/230/240 Vac selectable			
	Voltage distortion	<2% with linear load, <7% with distorting load			
	Voltage stability	±1%			
	Frequency	50/60 Hz (selectable)			
	Frequency regulation	±1Hz, ±3Hz selectable			
	Frequency stability	≤ 0.2% (free running)			
	Power factor	0.875			0.85
	Crest factor	3:1			
	Waveform	Pure sine wave			
	Output connection	Screw terminal block			
	Capacity @ 100 % load	4000 VA/3500 W	6000 VA/5250 W	8000 VA/7000 W	10000 VA/8500 W
	Overload @ 120% permanent load	4200 VA/4200 W	6300 VA/6300 W	8400 VA/8400 W	10200 VA/10200 W
	EFFICIENCY	VFI mode	Up to 93%		
ECO mode		Up to 97%			
In battery		Up to 94%			
GENERAL	Dimensions (WxDxH) mm	288x700x513			
	Weight (kg)	41		42	
	Alarms	Audible and visual alarm alerts for: incorrect battery polarity, short circuit, power failure, low battery, bypass transfer, and UPS fault, etc.			
	Protection	Battery polarity, short circuit, overload, overheating, deep discharge, overcharging.			
	Operating mode	Multimode: VFI, ECO, Emergency (SE), Mixed mode (SA and SE with separate outputs)			
	Cold start from the battery without mains power	Included			
	Protection class	IP20			
	BATTERY - CHARGER	Battery type	12V VRLA, AGM (maintenance-free lead)		
Number of batteries		20 units (120 cells)			
Charging time		80% of the battery capacity within 12h			
Internal battery charger		4 A Standard (additional 4 A with optional kit)			
External battery cabinet connections		Plug-in & Play			
ENVIRONMENTAL PARAMETERS	Operating temperature**	0 – 40°C			
	Relative humidity	0% – 90% (without condensing)			
	Altitude (a.s.l.)	<1000 m with no power derating, >1000 m with 1% derating for every 100 m			
	Audible noise at 1 m	≤60 dBA			
CONNECTIVITY	Built-in communication ports	USB, RS232, EPO On/Off contact, and additional slots for optional cards			
	User interface	LCD and function keys (parameters: voltage, frequency, load percentage, battery voltage, output voltage, estimated uptime, UPS temperature).			
	Optional accessories	Cards: SNMP, RS485 ModBus, dry relay contacts			
	Compatible software platforms	Microsoft Windows, Linux, Mac OS, VMware			
REGULATIONS	Standards	EN 50171, IEC EN 62040-1, IEC EN 62040-2, IEC EN 62040-3			
	Marking	CE, UKCA			

* Subject to conditions ** To be verified according to the battery parameters

CPSS

CPSS THREE-PHASE TECHNICAL DATA SHEET

MODEL		CPSS 3P 10 KVA	CPSS 3P 20 KVA	CPSS 3P 30 KVA	CPSS 3P 40 KVA
POWER	kVA	10	20	30	40
	kW	9	17	27	33
INPUT	Rated voltage	400 V three-phase with neutral			
	Voltage tolerance	±20%			
	Rated frequency	40 – 70 Hz			
	Power factor	≥0.99			
	Current distortion (THDi)	≤ 4% at full load	≤ 3% at full load		
OUTPUT	Rated voltage	380/400/415 V three-phase+neutral			
	Voltage stability	±1% (static load)			
	Frequency	50/60 Hz			
	Frequency stability	±0.01% (free running)			
	Power factor	0.9	0.85	0.9	0.825
	Crest factor	3:1			
	Voltage distortion	≤2% with linear load, ≤5% with distorting load			
	Permissible overload	120% permanent load, 125% for 10 minutes, 150% for 1 minute			
EFFICIENCY	VFI mode	Up to 95%			
	ECO mode	Up to 98%			
	In battery	Up to 94%			
GENERAL	Parallel connection	Up to 6 units			
	Dimensions (WxDxH) mm	260x850x890 (including wheels)			
	Weight (kg)	74	76	85	88
	Alarms	Audible and visual alarm alerts for: incorrect battery polarity, short circuit, power failure, low battery, bypass transfer, and UPS fault, etc.			
	Protection	Battery polarity, short circuit, overload, overheating, deep discharge, overcharging.			
	Operating mode	Multimode: VFI, ECO, Emergency (SE), Mixed mode (SA and SE with separate outputs)			
	Cold start from the battery without mains power	Included			
	Protection class	IP 20			
	BATTERY	Number per string (12V)	40 pcs		
Common battery for parallel configuration		Supported			
Internal battery (optional)		Up to blocks 40 12 V 7/9 Ah batteries		N.A.	
Max. charging current*		12.9 A	14.5 A	24.7 A	28 A
Cold start from the battery without mains power		Included			
BYPASS	Rated voltage	380/400/415 V three-phase+neutral			
	Voltage tolerance	Basic window ±10% (programmable ±5% – ±15%)			
		Critical window ±25% (programmable ±16% – ±30%)			
	Frequency	50/60 Hz			
	Frequency tolerance	±1 Hz / ±3 Hz (selectable)			
Protection	Fuses				
ENVIRONMENTAL PARAMETERS	Operating temperature**	0 – 40°C			
	Altitude (a.s.l.)	<1000 m with no power derating, >1000 m with 1% derating for every 100 m.			
	Relative humidity	0 – 95% (without condensing)			
	Audible noise at 1 m.	<52dB		<55dB	
CONNECTIVITY	User interface	4.3" colour LCD touch screen display with removable SD card			
	Built-in communication ports	USB, RS232, EPO, 3 out dry relay contacts (programmable) and two additional slots for optional cards			
	Optional accessories	Cards: SNMP, RS485, ModBus, 6 in/6 out dry relay contacts, touch panel for remote monitoring, Mixed mode kit			
REGULATIONS	Standards	EN50171, IEC EN 62040-1, IEC EN 62040-2, IEC EN62040-3			
	Marking	CE, UKCA			

* Subject to conditions ** To be verified according to the battery parameters

**Central Power Supply System,
fully EN 50171 compliant
certified by third party**



CPSS 1/1
4000-10000 VA



CPSS 3/3
10-40 kVA



Rev.2024/06 - Our commitment to continuous innovation means that catalogue data may be subject to change without notice

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