

SCU UPS

CMS Series Modular UPS

Truly Modular UPS Full UPS functioned UPS Module



Choice of UPS Module (10kVA, 25kVA, 50kVA) result in Rational Redundancy
Modular, hot-swappable, field-replaceable STS, Monitor, UPS module
Scalable from 10kVA to 800kVA. Parallel-capable up to 3200kVA.

Product Overview

CMS UPS units are non-isolated, industrial level, green UPS, adopting advanced modular power protection concept. It delivers the best combination of rectifier, filter, charger, inverter and intelligent power protection. Applying innovative current sharing rectifier control, master-slave synchronization in sequence control, multi-level decentralized control and 3-level sine wave modulation technology, it features great efficiency, flexibility and reliability.

CMS Modular architecture can scale power as demand grows or as higher levels of availability are required. CMS UPS provide industry-leading efficiency, availability and performance for small, medium and large data centers and mission critical environments.



Wire in/out mode:

3/3, 3/1, 1/3, 1/1

CMS FEATURES

- Rational redundant structure
UPS module: 10kVA, 25kVA, 50kVA; System: 50kVA, 100kVA, 150kVA, 250kVA, 350kVA, 500kVA, 800kVA.
- Great performance index
overall efficiency $\geq 95\%$ (AC-AC), inverter efficiency $\geq 98\%$ (DC-AC), THDI $\leq 3\%$, and input PF ≥ 0.99
- N+X module-level redundancy UPS System
- Multi-level decentralized control technology and Master-slave synchronization in sequency control eliminating the system failure bottleneck
- Each module automatically equally shares the input and output current, all UPS modules share the batteries
- Battery management:
Battery discharge management, auto-transfer between floating and equal charging, temperature compensation
- Space-saving high density design, Rack-based for agility and aesthetics
- Monitor Function
C/S-Oriented Architecture Software which is available to monitor multiple UPS up to 600 sets;
B/S-Oriented Architecture which is available to check via internet browser
- Standard configuration
Manual bypass, SPD (Class C), RS232, RS485 Communication ports, Remote monitor software, dry contacts
- Optional configuration
Input/output Transformer, Battery Bank, IPDS (Intelligent Power Distribution System)

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CMS-50/10

Adaptable 10 to 50 kVA power capacity

10 kVA UPS module (CM10)

Configuration: 5 slots

Components: STS module, Monitor module, UPS module, Power distribution

Top or bottom feed

System Dimension: 600*800*1200 (W*D*H) mm

Module Dimension: 482*465*89 (W*D*H) mm



CMS-100/10

Adaptable 10 to 100 kVA power capacity

10 kVA UPS module (CM10)

Configuration: 10 slots

Components: STS module, Monitor module, UPS module, Power distribution

Top or bottom feed

System dimension: 600*800*1600 (W*D*H) mm

Module dimension: 482*465*89 (W*D*H) mm



CMS-150/25

Adaptable 25 to 150 kVA power capacity

25 kVA UPS module (CM25)

Configuration: 6 slots

Components: STS module, Monitor module, UPS module, Power distribution

Top or bottom feed

System Dimensions: 600*800*1600 (W*D*H) mm

Module Dimensions: 482*464*133 (W*D*H) mm



CMS-250/25

Adaptable 25 to 250 kVA power capacity

25 kVA UPS module (CM25)

Configuration: 10 slots

Components: STS module, Monitor module, UPS module, Power distribution

Top or bottom feed

System Dimensions: 800*800*2000(W*D*H) mm

Module Dimensions: 482*464*133(W*D*H) mm



CMS-350/50

Adaptable 50 to 350 kVA power capacity

50 kVA UPS module (CM50)

Configuration: 7 slots

Components: STS module, Monitor module, UPS module, Power distribution

Top or bottom feed

System Dimensions: 800*1000*2000(W*D*H) mm

Module Dimensions: 482*700*176(W*D*H) mm



CMS-500/50

Adaptable 50 to 500 kVA power capacity

50 kVA UPS module (CM50)

Configuration: 10 slots

Components: STS module, Monitor module, UPS module, Power distribution

Top or bottom feed

System Dimensions: 1400*1000*2000(W*D*H) mm

Module Dimensions: 482*700*176(W*D*H) mm



CMS-800/50

Adaptable 50 to 800 kVA power capacity

50 kVA UPS module (CM50)

Configuration: 16 slots

Components: STS module, Monitor module, UPS module, Power distribution

Top or bottom feed

System Dimensions: 2000*1000*2000(W*D*H) mm

Module Dimensions: 482*700*176(W*D*H) mm



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UPS Module CM10,CM25,CM50

CM10, CM25, CM50 UPS module

- Rated power: 10KVA, 25KVA , 50KVA
- Online double conversion technology ensures reliable power supply
- High efficiency reduces power and cooling costs.
- Each UPS module is a fully functioned UPS, delivering a combination of converter, inverter, charger, and controller.
- It has various protections and intelligent communication ports. Dust proof design: IP30; online cleanable airfilter; functions well, even in poor environment.



CM10(2U)



CM25(3U)



CM50(4U)

Montior Module CMS-CSU

CMS-CSU monitor module

- Dual-core 16-bit processor
- Easy-to-read 240x64 LCD Touch Screen
- CMS decentralizes its controller in each UPS module. The monitor module is for display and communication only. Online replacement without forced shutdowns, STS module and UPS module.

Display of important operational information:

- General information
- System information
- Battery information
- Module information
- System output
- Event record
- Index setup

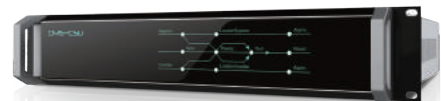


- Communication (local and remote)
RS232, RS485 communication interface
- Output dry contacts
- TCP/IP, SNMP, MODBUS(optional) for remote minitor.

STS Module CMS-STS

CMS-STS STS module

- Parallel of SCR and AC contactor
- High reliability and overload ability (1000% -1 min)
- Transfer time < 1 ms
- Functions such as self-diagnose, interlock and protection.
- RS485 communication
- Can be replaced easily without forced shutdowns.



UPS MODULE TECHNICAL SPECIFICATION

Model	CM10	CM25	CM50
Rated power	10 kVA	25 kVA	50 kVA
Input/Output mode	3/3, 3-phase + N + E		
Input PF	≥ 0.99		
THDI (%)	≤ 3%		
Overload ability	125%, 10mins		
max charging power	2.5KW	6KW	12KW
max heat dispassion	475W	1187W	1900W
Dimension (mm)	482(W)×465(D)×89(H)	482(W)×464(D)×133(H)	482(W)×700(D)×176(H)
Weight (kg)	16	20	40

UPS SYSTEM TECHNICAL SPECIFICATION

System model		CMS-50/10	CMS-100/10	CMS-150/25	CMS-250/25	CMS-350/50	CMS-500/50	CMS-800/50
Maximum power		50kVA	100kVA	150kVA	250kVA	350kVA	500kVA	800kVA
UPS module model		CM10		CM25		CM50		
Mains Input	Input mode	3-phase +N +E, 1-phase +N +E						
	Input voltage	380V/220V±20%, 400V/230V±20%, 415V/240V±20%						
	Input frequency	50Hz±10%, 60Hz±10%						
	Power woke-in (Sec.)	60sec						
	THDI (%)	< 3%						
	Input PF	≥ 0.99						
Bypass Input	Input voltage	380V/220V±20%, 400V/230V±20%, 415V/240V±20%						
	Input frequency	50 Hz, 60 Hz						
	Range of Frequency Synchro	50 Hz±4%, 60 Hz±4%						
DC Input	Rated Input voltage	±384VDC						
	Input voltage tolerance	±345V~±440V DC						
Battery charging	Charging current limited	yes						
	Charging ability	10 hours (2 hours back up)						
	Stability of charging voltage	±1%						
AC output	UPS power factor	1						
	Output voltage	380V/220V AC, 400V/230V AC, 415V/240V AC						
	Output frequency	±4%; ±0.2%(battery supply)						
	Output voltage stability	±1%						
	Output voltage recovering time	< 20ms (load 0-100% change)						
	Overload ability	Operate 10mins with 125% load						
	Transfer from mains to battery supply	0ms						
	Transfer from bypass to inverter supply	<1ms						
	Peak factor	3:1						
	Waveform distortion	≤ 1% (linear load), ≤ 3%(non-linear load)						
	Overall efficiency	≥ 95% (AC-AC), ≥ 98% (DC-AC)						
Operation environment	Load share precision	≤ 5%						
	Ambient temperature	-25°C ~ 60°C						
	Operating temperature	-5°C ~ 40°C						
	Maximum operation altitude	≤ 1500m						
	Relative humidity	≤ 95% non-cadency						
	Protection degree	IP30						
	Cooling	Air cooling						
	Applicable safety standards	EN62040-1-1:2003 IEC60950-1:2001						
	Electromagnetic compatibility	EN62040-2:2006						
Acoustic noise	≤ 55DB							
Others	Cabinet	Standard 19 inch cabinet						
	Monitor management system	UPSSupervisor						
	Interface	RS232, RS485 and 8 dry contact, TCP/IP adapter, SNMP(optional)						
	Display	Touch LCD/LED Screen						
	Weight (kg)	150	200	200	260	400	500	700