



SM040KAMFA | SMART APP ONLINE 3-PHASE MODULAR UPS SYSTEM

Safeguard mission-critical applications with seamless, double-conversion power protection

The CyberPower SM040KAMFA Smart App Online 3-Phase Modular UPS System brings flexibility, space savings, and efficiency to 3-Phase power protection technology. Configurable for N+N system or N+1 power module redundancy, the system can intelligently manage individual modules to achieve higher efficiency. The customizable modular design can be configured as a tower, side-by-side, or integrated within a rack. The high-density, scalable 10kVA/10kW power modules are 2U in height, saving space while providing more options for capacity expansion.

The SM040KAMFA features double-conversion topology for seamless power protection and a pre-installed RMCARD205 for remote management. The user-friendly 7" color touchscreen displays key status indicators at-a-glance. Three-stage Smart Battery Management (SBM) equalizes battery voltages and reduces excessive heat to extend battery life. Plus, hot-swappable power modules, battery and, bypass allow for rapid replacement and



minimal impact to system operation. Ideal for high-end data centers, the SM040KAMFA 3-Phase Modular UPS System assures reliable, high-quality AC power and includes a One-Year Limited Warranty.

SPECIFICATIONS

GENERAL

Dual Power Inputs	Yes
Energy Saving	Online ECO Mode Efficiency >97.5%
Hot Swappable Bypass Module	Yes
Hot Swappable Power Module	Yes
Power Module Capacity	5
Parallel Expansion	Yes
Power Module Redundancy Capability	Yes
UPS Topology	Online Double Conversion

BATTERY

Battery Bus Voltage	Nominal: 240VDC, one-side range: 120VDC - 132VDC
Battery Cabinet	Modular External Cabinet
Charger Voltage Tolerance	≤1% Float
Extended Battery Cabinet	BCT6L9N225
Hot Swappable Battery Module	Yes
Recharge Power	Default 10% x UPS Power
Recharge Power (Selectable)	1% - 20%
Ripple Current	≤5% C10
Ripple Voltage	≤1% VDC Float
Temperature Compensation (Per Cell)	-3 mV/°C

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SPECIFICATIONS CONT.

INPUT		OUTPUT CONT.	
Backfeed Protection	Yes	Max Change Rate of Synch Frequency	1 Hz/s
Bypass Input Voltage Range	-20% - +15%	Max Change Rate of Synch Frequency (Selectable)	0.1 - 5 Hz/s
Bypass Input Voltage Range (Selectable)	Lower limit: -10%, -20%, -30%, -40% Higher limit: +10%, +15%, +20%, +25%	Maximum Capacity (VA)	40,000 VA
Bypass Overload Protection	110% - 130% Load for 5 Min 130% - 150% Load for 1 Min >150% Load for 300ms	Maximum Watts Capacity	40,000 W
Bypass Rated Current	111A@ 208V	Neutral Current Capability	170 %
Bypass Frequency Tolerance (Default)	310%	Non-Linear Load Capability	100 %
Bypass Frequency Tolerance (Selectable)	32.5%, 35%, 310%, 320%	Outlet Type	1 - Hardwire Terminal Block
Bypass to Inverter Switch Time	Synchronized switch: ≤1ms	Output Connector	Hardwire (L1, L2, L3, N, G)
Current rating of bypass neutral cable (A)	1.7 x Input Rated Current	Output Frequency	50 - 60 Hz (auto-sensing/configurable)
Input Connector	Hardwire (L1, L2, L3, N, G)	Output Power Factor	1
Input Frequency Range	50 Hz - 60 Hz	Output Voltage	208/120V 220/127V
Input Power Factor	0.99	Output Voltage Range	187 VAC - 260 VAC
Input Voltage	208/120V 220/127V	Overload Protection	105 - 110% Load for 60 min 110 - 125% Load for 10 min 125 - 150% Load for 1 min >150% Load Immediately
Input Voltage Range	187 VAC - 260 VAC	Short Circuit Protection	300% - 200ms
Phase	3-Phase or Single Phase	Synchronization Window (Rated)	32Hz
Synchronization Window	Rated frequency: 32Hz	Synchronization Window (Selectable)	31Hz - 35Hz
Synchronization Window (Selectable)	30.5Hz - 35Hz	Transient Voltage Response	35%
THDI (%)	< 4% (Full Linear Load)	Typical Transfer Time	0 ms
OUTPUT		VA	40,000 VA
Automatic Voltage Regulation	31 (Balanced Load) 31.5 (100% Unbalanced Load)	Watts	40,000 W
Bypass	Internal Bypass (Automatic and Manual)		
Crest Factor	3:1		
Efficiency	92.5% (Battery Mode) 93% (Normal Mode)		
Harmonic Distortion	< 1.5% at Linear Load < 6% at Non-Linear Load		
Built-in Maintenance Bypass	Yes		

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SPECIFICATIONS CONT.

MANAGEMENT AND COMMUNICATIONS

Dry Contacts	Yes
Emergency Power Off (EPO) Port	Yes
LCD	Multifunction LCD, Touch Screen, Color
LED Status Indicators	Rectifier, Battery, Bypass, Inverter, Output
SNMP / HTTP Remote Monitoring	Yes - RMCARD205 pre-installed
Communication Port/Protocols	1 x RS-232 DB9 Serial 1 x RS-485 Modbus (2-wire Twisted Pair)
Software (Free Download)	PowerPanel® Business

PHYSICAL

Color	Black
Form Factor	Modular
Material of Construction	Metal
Mounting Hardware	Yes
Rack Height	19U

PHYSICAL DIMENSIONS

Physical Dimensions - WxHxD (cm)	48.51 x 94.23 x 77.47 cm
Physical Dimensions - WxHxD (in.)	19.1 x 37.1 x 30.5 in.
Weight (kg)	80.6 kg
Weight (lb)	177.7 lbs.

SHIPPING DIMENSIONS

Shipping Dimensions - WxHxD (cm)	63.2 x 112.4 x 98.81 cm
Shipping Dimensions - WxHxD (in)	24.88 x 44.25 x 38.9 in.
Weight (kg)	121.97 kg
Weight (lb)	268.9 lbs.

POWER MODULE DIMENSIONS

Individual Power Module - Rack Units	2U
Individual Battery Module - Rack Units	3U

ENVIRONMENTAL

Audible noise at 1m from surface of unit	56 dBA
Ingress Protection	IP20
Maximum Air Exchange	3.02 m3/min
Online Thermal Dissipation	11,430.2 BTU/hr
Operating Elevation	0 - 10,000 ft (0 - 3,048 m)
Operating Elevation Note	At ≤1,000m above sea level, de-rate power by 1% per 100m between 1,000m and 3,048m
Operating Relative Humidity	0 - 95 % (non-condensing)
Operating Temperature	32 - 104°F (0 - 40°C)
Operating Temperature Note	Battery life is halved for every 50°F (10°C) increase above 68°F (20°C)
Storage Battery Temperature Note	Optimum battery storage between 5 - 68°F (-15 - 20°C)
Storage Relative Humidity	0 - 95% (non-condensing)
Storage Temperature	-4 - 158°F (-20 - 70°C)

CERTIFICATIONS

Environmental	RoHS Compliant
Safety	cTUVus UL1778, CSA C22.2, No. 107.3-14 CFR 47 FCC Part 15, Subpart B, Class A IEC62040-2

WARRANTY

Product Warranty	One-Year Limited Warranty
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