

M Series UPS

75 - 300 kVA 1.0PF 208 Vac 3Ph



Online double conversion Modular UPS with parallel cabinet architecture, N+X parallel module redundancy and multi-language touch 7.0 display.

M Series UPS is for internet service providers, banking, medical and telecommunication data centers, industrial control rooms and corporate offices.

FEATURES

Clean power

Online double conversion UPS with sine wave output

Power factor 1.0 output

'Step-by-step' transfer from battery mode to AC mode minimizes impact on mains supply

Low energy consumption and cost of ownership

Low energy consumption with efficiency of up to 94%

High input power factor of 0.99% minimizes energy consumption and hardware installation costs

Eco mode for system and sleep mode for modules is available to reduce energy consumption

Simulated 75% load test returns power to the grid

Advanced battery management

Maximizes battery life with intelligent charging

Displays estimated battery backup and tests for battery capacity

Flexible, scalable and reliable

Top and bottom access cabinets

Hot swappable power modules

Parallel operation of up to four UPS cabinets

Synchronized transfer to bypass for all parallel units

Firmware upgradable

Redundant dual control modules

UPS management PC software - Muser 5000

Large touch screen 7.0 display

Options

External battery cabinet frames

Remote monitor

SNMP card

Parallel cable

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SPECIFICATIONS

UPS Cabinet Frame	M 3325A-E 75K MF D7	M 3325A-E 125K MF D7	M 3325A-E 150K MF D7	M 3325A-E 200K MF D7	M 3325A-E 250K MF D7	M 3325A-E 300K MF D7
Capacity kVA (kW)	25-75	25-125	25-150	25-200	25-250	25-300
Module slots (total height U)	3 (9U)	5 (15U)	6 (18U)	8 (24U)	10 (30U)	12 (36U)
AC input breaker Amp	3ph 320A	3ph 500A	3ph 500A	3ph 800A	3ph 1000A	3ph 1250A
AC output breaker Amp	3ph 320A	3ph 500A	3ph 500A	3ph 630A	3ph 800A	3ph 1000A
Bypass breaker Amp	3ph 320A	3ph 500A	3ph 500A	3ph 630A	3ph 800A	3ph 1000A
Cable access	bottom	bottom	top, bottom	top, bottom	top, bottom	top, bottom
Weight Kg w/o modules	170	230	260	280	650	720
H x W x L mm	1200 x 600 x 850	1600 x 600 x 850	2000 x 600 x 850	2000 x 1200 x 850	2000 x 1200 x 850	2000 x 1200 x 850

Installation Data	75kVA	125kVA	150kVA	200kVA	250kVA	300kVA
AC input cable mm ²	120	95(2)	120(2)	185(2)	150(3)	240(3)
BPS input cable mm ²	120	95(2)	120(2)	150(2)	240(2)	150(3)
AC output cable mm ²	120	95(2)	120(2)	150(2)	240(2)	150(3)
DC input cable mm ²	150	120(2)	150(2)	240(2)	185(3)	240(3)
Grounding cable mm ²	50	95	120	150	240	240

UPS Module	M 3325A-E M1.0PF
Capacity kVA / kW	25 / 25
Charge current max Amp	20
Height	3U
Weight Kg	34

External Battery Cabinet Frame	M 24-065-144 BF	M 24-100-144 BF	M 24-120-144 BF
DC voltage	± 144 Vdc	± 144 Vdc	± 144 Vdc
12 V battery size	65 Ah	100 Ah	120 Ah
Battery layout	24 batteries (4 levels X 6)	24 batteries (4 levels X 6)	24 batteries (4 levels X 6)
DC breaker	250 A	400 A	400 A
Weight Kg w/o battery	197	197	197
H x W x L mm	1600 x 600 x 850	2000 x 600 x 850	2000 x 600 x 850

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AC Input

Rated voltage	208/120, 220/127 Vac (3 PH + N + PE)
Voltage range	+20%, -25% (96-150Vac or 102-159Vac), full load
Input power factor	≥0.99%
Input frequency	40 - 70 Hz
THD	≤ 3% 100% non-linear
Bypass range	Max. voltage: +25% (optional +10%, +15%, +20%) Min. voltage: -40% (optional -10%, -20%, -30%) Frequency: ±10%

AC Output

Rated voltage	208/220, 220/127 Vac (3 PH + N + PE)
Power factor	1.0
Voltage regulation	±1%
Efficiency	Up to 94%
Frequency utility mode	±1% / ±2% / ±4% / ±5% / ±10% of the rated frequency (optional)
Frequency battery mode	50/60 Hz ± 0.1%
THD	≤2% linear load, ≤5% non-linear load
Overload AC mode	<110% 60 min, <125% 10 min, <150% 1 min, >150% bypass
Overload bypass mode	135% at ≤ 30°C or 125% at ≤40°C: continuously, 1000% for 100ms then shutdown
Overheat	Line Mode: switch to bypass; Backup Mode: shutdown

External Battery Requirements

DC nominal	+/- 132Vdc 1.0PF, (optional: +/- 96Vdc 0.8PF, +/-108/120Vdc 0.9PF, +/-144/156Vdc 1.0PF)
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General Specifications

Parallel operation	Up to 4 cabinets
Color display	177 mm / 7 inch Touch Screen
Communication	(2) ECU control slots [parallel, LBS, LED], (1) dry contact slot [EPO, switch outs, inputs, BP feedbacks, dry contacts], (1) monitor slot [batt temp(2), CAN adjust, CAN bms, USB, RS232, RS485(2), LCD, NET], (1) intelligent slot [optional SNMP]
PC software	MUSER 5000
Temperature	Operating 0 to +40° C, Storage -25 to +55° C
Altitude	< 1500 M
Humidity	≤95% non-condensing

Standards

Safety	IEC62040-1-1
EMC	IEC62040-3, IEC61000-4-2, IEC61000-4-3, IEC610004-4, IEC610004-5, IEC610004-6, IEC610004-8