



Professional On-Line & Line-Interactive UPS Solutions

True Double Conversion 30 kVA - 210 kVA
Output Power Factor 1.0 - LCD Display - Perfect Battery Pack

M-Plus Online Long Backup UPS System

60 - 210 kVA Modular Design - 3-Phase Input / 3-Phase Output

- Power Factor 1.0** (kVA = kW)
- Efficiency up to 96%
- 30 kVA per module
- Adjustable charging current
- Adjustable Battery Voltage
- Price/Performance No. 1
- 5,7" LCD Panel
- Power modules are hot swappable
- Redundancy ready
- Easy maintenance in service
- Emergency power off function (EPO)
- Maintenance Bypass included



Item	Short description	Description
MP-3330UK	M-Plus 30U Kit	30U Kit - including 30U Rack, STS, Maintainace Bypass and 5,7" LCD Panel for 3 Power modules (30 - 90 kVA)
MP-3342UK	M-Plus 42U Kit	42U Kit - including 42U Rack, STS, Maintainace Bypass and 5,7" LCD Panel for 7+1 Power modules (90 - 210+30 kVA)
MP-30KVA	30 kVA Power Module	30 kVA Power Module for M-Plus 30U or 42U System
SNMP-002	SNMP Card	SNMP Card for M-Plus Series

Sample Configurations

30U + 2x 30 kVA	60kVA (or 30+30 redundant)	30U Kit - including 30U Rack, STS, Maintainace Bypass and 5,7" LCD Panel, 2 Power modules
30U + 3x 30 kVA	90kVA (or 60+30 redundant)	30U Kit - including 30U Rack, STS, Maintainace Bypass and 5,7" LCD Panel, 3 Power modules
42U + 3x 30 kVA	90kVA (or 60+30 redundant)	42U Kit - including 42U Rack, STS, Maintainace Bypass and 5,7" LCD Panel, 3 Power modules
42U + 4x 30 kVA	120kVA (or 90+30 redundant)	42U Kit - including 42U Rack, STS, Maintainace Bypass and 5,7" LCD Panel, 4 Power modules
42U + 5x 30 kVA	150kVA (or 120+30 redundant)	42U Kit - including 42U Rack, STS, Maintainace Bypass and 5,7" LCD Panel, 5 Power modules
42U + 6x 30 kVA	180kVA (or 150+30 redundant)	42U Kit - including 42U Rack, STS, Maintainace Bypass and 5,7" LCD Panel, 6 Power modules
42U + 7x 30 kVA	210kVA (or 180+30 redundant)	42U Kit - including 42U Rack, STS, Maintainace Bypass and 5,7" LCD Panel, 7 Power modules

42U + 7x 30 kVA	210kVA +30 kVA redundant	42U Kit - including 42U Rack, STS, Maintainace Bypass and 5,7" LCD Panel, 8 Power modules
-----------------	--------------------------	---

Backup Time for M-Plus Series (@100% Load in minutes)

Battery capacity	30 kVA	60 kVA	90 kVA	120 kVA	150 kVA	180 kVA	210 kVA
480V / 27 Ah	9:12	3:30	--:--	--:--	--:--	--:--	--:--
480V / 45 Ah	17:48	7:00	4:00	--:--	--:--	--:--	--:--
480V / 90 Ah	42:36	17:48	10:36	7:00	5:00	3:48	2:54
480V / 135 Ah	69:36	29:48	17:48	12:18	--:--	--:--	--:--
480V / 153 Ah	80:36	34:48	19:00	--:--	--:--	--:--	--:--
480V / 180 Ah	97:18	42:36	25:42	17:48	13:24	10:30	8:30
480V / 225 Ah	125:24	53:00	33:54	23:36	--:--	--:--	--:--

Technical specifications

Model	MP-33060 ML	MP-33090 ML	MP-33120 ML	MP-33150 ML	MP-33180 ML	MP-33210 ML
Capacity	60 kVA	90 kVA	120 kVA	150 kVA	180 kVA	210 kVA
Input / Output	3-phase in / 3-phase out					
Power Modules	2	3	4	5	6	7
Topology	True Double Conversion Online					
Input						
Nominal Voltage	3 x 400 VAC (3Ph + NPE)					
Voltage Range	305 ~ 477 VAC at 100% load; 208 ~ 304VAC at <70% load					
Frequency Range	40Hz ~70Hz					
Power Factor	> 0.99 at 100% load, >0.98 at 50% load					

Harmonic Distortion (THDi)	< 3% @ 100% load
Output	
Nominal Voltage	3 x 400 VAC (3Ph + NPE)
Voltage Regulation (Steady State)	± 1% Typical (balanced load) ± 2% Typical (unbalanced load)
Voltage regulation (Transient)	± 5% Typical
Nominal Frequency	50/60Hz
Frequency Range (synchronized range)	46Hz ~ 54Hz or 56Hz ~ 64Hz
Overload capability	1 hour for 110%, 10 min for 120%, 1 min for 150% and 200ms for >150%
Harmonic Distortion	1% THD (Linear Load), 4% THD (Non-linear Load)
Efficiency	> 96% at over 50% load, > 95% at over 25% load
Battery Charger	
Nominal Voltage	+/- 216V (12V x 38 pcs)
Maximum Voltage	+/- 240V (12V x 40 pcs)
Minimum Voltage	+/- 192V (12V x 36 pcs)
Floating Charge	2.25V/Cell

Voltage		
Boost Charging Voltage	2.35V/Cell	
Temperature Compensation	Yes	
Maximum charging current	8A (User-adjustable)	
Physical	30 kVA - 90 kVA	90 kVA - 210 kVA
Size (W x D x H)	600 x 1100 x 1485 mm (30U)	600 x 1100 x 2030 mm (42U)
Operation Temperature	0 ~ 40C°	
Relative Humidity	0 ~ 95% non-condensing	
Altitude	<1000 m for Nominal power	
IP Class	IP 20	
Management		
RS-232/USB	Supports Windows 2000/2003/XP/Vista/2008/7/8, Linux, Unix and MAC	
Optional SNMP	Power management from SNMP manager and web browser	
Standard		
Safety	IEC/EN 60950-1; IEC/EN 62040-1	
EMC	IEC/EN 62040-2 Category C3	