

# Online UPS 1Phase Out

## MF Series

05 / 06 / 10 / 20 / 30KVA  
1:1 Phase PF: 0.9

### Application:

Server and Others Networking Equipments



Control Panel

### Features:

- True Online Double Conversion with DSP Controlled Sine Wave
- IGBT, Both Inverter & Rectifier
- Input Current Harmonic: <5%
- Optimization Battery Group, The Quantity of Battery: 16/18/20 Pises
- High Input Power Factor 0.99
- High Output Power Factor 0.9
- Wide Input Voltage Range: 120~280V AC
- Wide Input Frequency Range (50Hz: 45~55Hz/60Hz: 54~66Hz)
- Generator Compatibility
- Support Economic Operation (ECO) Mode
- Self-Testing while UPS Startup
- Optional Parallel upto 4 units
- Static Bypass and Cold Start
- Auto Start and cold start function
- Isolation Transformer Compatible

### Rear Panel

1. Fan
2. Input Switch
3. Output Switch
4. Maintenance Switch
5. Terminal
6. Com Port
7. USB Port
8. Parallel Port
9. EPO
10. Intelligent Slot / SNMP(Optional)



## ► Technical Specifications of MF Series 5~30KVA

MODEL	MF1105L16	MF1106L16	MF1106B16	MF1110L16	MF1110B16	MF3110L16	MF3120L16	MF3130L16
Capacity (KVA)	05	06		10		20		30
<b>INPUT</b>								
Nominal Voltage	220V / 230V / 240V AC (L+N+PE)					380V/400V/415V AC(3Ph+N+PE)		
Operating Voltage Range	100V~300V AC Load Dependent					277V~480V AC Load Dependent		
Operating Frequency Range	50 / 60 Hz $\pm$ 10% (Auto Sensing)							
Power Factor	$\geq$ 0.99							
Bypass	Voltage	$\pm$ 20% (Configurable)						
	Frequency	$\pm$ 10% (Configurable)						
ECO Range	Same as the Bypass, can be configured							
Generator Input	Competible							
<b>OUTPUT</b>								
Rated Voltage	220V / 230V / 240V AC L+N+PE (Configurable)							
Power Factor	0.8 (Standard) 0.9 (Optional)							
Voltage Regulation	$\pm$ 1%							
Frequency	Auto Sensing 50 / 60 Hz $\pm$ 1~10% Sync Mode (Configurable), 50/60 Hz $\pm$ 0.1 Hz Battery Mode							
Crest Factor	3:1							
Overload	$\leq$ 125% for 10 Min, $\leq$ 150% for 30 Sec, $\geq$ 150% for 200ms							
Harmonic Distortion (THDv)	$\leq$ 2% with Linear Load, $\leq$ 5% with Non Linear Load							
Efficiency	Up to 94% Dual Conversion Mode, 99% ECO Mode							
<b>BATTERY</b>								
Battery Voltage	192V DC / 216V & 240V DC (Configurable)							
Typical Recharge Time	6~8 Hours to 90% of full Capacity							
Charge Current	6A				10A			
<b>SYSTEM FEATURES</b>								
IP Protection	IP 20							
Transfer Time	Zero							
EPO / ECO / CVCF	Shutdown UPS Immediately / ECO and CVCF Mode can be Configurable							
Alarm / Protection	Short Circuit, Input Under/Over Voltage, Over Temperature, Over Current, Over Load, DC BUS Under / Over Voltage and Battery low							
LED Display	Line Mode, Backup Mode, ECO Mode, Bypass Mode, Battery Low, Battery Bad, Overload & UPS Fault							
LCD Display	Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Temperature & Remaining Battery Backup Time, Load VA/W, Load and Battery Barograph							
<b>ENVIRONMENTAL</b>								
Temperature	Operating: 0~45°C, Storage: -10°C ~ 55°C							
Humidity / Altitude	0~95% RH Non-condensing / <1500 M							
Noise	Low Audible Noise Level							
<b>PHYSICAL</b>								
Dimension WxDxH (mm)	220x481x438		250x500x650	220x481x438	250x500x650	250x502x616		
Net Weight (Kg)	17	18	65	20	70	35	37	40
<b>STANDARDS</b>								
Quality	ISO 9000, ISO 14001, OHSAS 18001, ISO 27001, BIS, RoHS							
Safety	IEC/EN62040-1							
EMC / Performance	IEC/EN62040-2; IEC/EN62040-3, Complying to CE							
<b>COMMUNICATION INTERFACE</b>								
Standard	RS-232							
Optional	SNMP / ModBus / Dry Contact / USB / RS-485							
Monitoring Software	NetAgent Utility v5.8 / View Power / UPSilon 2000 / Muser 4000							

\*Specifications are subject to change without prior notice.

