

MUL

Line-Interactive UPS



General introduction

This UPS is specially designed for Personal Computer with multi-functions. Its light weight, compact design perfect fits to the limited working environment. The line of UPS is equipped with one boost and one buck AVR to stabilize input voltage range. It is also built-in with DC start function. This function enables the UPS to be started up without AC power supply. Although it's a small UPS, the main features of UPS are listed below:

Features

- Line Interactive UPS with simulated sinewave output
- Excellent microprocessor control guarantees high reliability (Internal self-diagnostic technology)
- Boost and buck AVR for voltage stabilization (One boost and one buck control)
- Auto restart while AC is recovering
- Cold start function
- Off-mode charging
- Fast intelligent battery recharge function
- Optional Generator compatible
- Optional USB/RS232 communication port and RJ11 /RJ45 protection



LED display



MUL-750
MUL-900



MUL-1500
MUL-2000



MUL-1200

Technical Specifications

Model	MUL-400	MUL-750	MUL-900	MUL-1000	MUL-1200	MUL-1500	MUL-2000
Capacity	400VA/240W	600VA/360W	800VA/480W	1000VA/600W	1200VA/720W	1500VA/900W	2000VA/1200W

INPUT

Nominal Input Voltage	110/120 Vac or 220/230/240 Vac
Operating Voltage Range	81 ~ 145 Vac/162 ~ 290 Vac
Operating Frequency Range	60/50Hz (Auto sensing)

OUTPUT

AC Voltage Regulation (Batt. Mode)	± 10%
Frequency Range (Batt. Mode)	60/50Hz ± 1 Hz
Transfer Time	Typical 2~6ms, 10ms Max.
Waveform (Batt. Mode)	Simulated Sinewave

BATTERY

Battery Voltage	12Vdc	24Vdc					
Battery Type & Number	12 V/4.5 Ah × 1	12 V/7Ah × 1	12 V/9 Ah × 1	12 V/7 Ah × 2	12 V/7 Ah × 2	12 V/9 Ah × 2	12 V/9 Ah × 2
Typical Recharge Time	4 ~ 6 hours recover to 90% capacity			6 ~ 8 hours recover to 90% capacity			

INDICATORS

LED Display(LED version)	AC Mode, Battery Mode, Overload, Fault
LCD Display(LCD version)	AC Mode, Battery Mode, Load Level, Battery Level, Input Voltage, Output Voltage, Overload, Fault, and Battery Low

PROTECTION

Full Protection	Short circuit, Overload , Overcharge and overdischarge protection
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ALARM

Battery mode	Sounding every 10 seconds
Low Battery	Sounding every second
Overload	Sounding every 0.5 second
Battery Replacement Alarm	Sounding every 2 seconds
Fault	Continuously sounding

MANAGEMENT

Communication port	USB or RS232(Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7, Linux, Unix, and MAC)
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OPERATING ENVIRONMENT

Humidity	0~90 % RH @ 0~ 40° C (non-condensing)	
Noise Level	Less than 45dB	Less than 55dB

PHYSICAL

Approx. Dimension (D × W × H)	298 × 101 × 142mm	353 × 149 × 162mm	380 × 158 × 198mm				
Approx. Net Weight	Approx. 3.8kg	Approx. 4.3kg	Approx. 4.9kg	Approx. 7.8kg	Approx. 8.4kg	Approx. 10.1kg	Approx. 10.5kg
Safety	IEC/EN 62040-1; IEC/EN 60950-1						
EMC	IEC/EN 62040-2; IEC 61000-4-2; IEC 61000-4-3; IEC 61000-4-4; IEC 61000-4-5; IEC 61000-4-6; IEC 61000-4-8						
Performance	IEC/EN 62040-3						