

# MP98B Series 10-600kVA

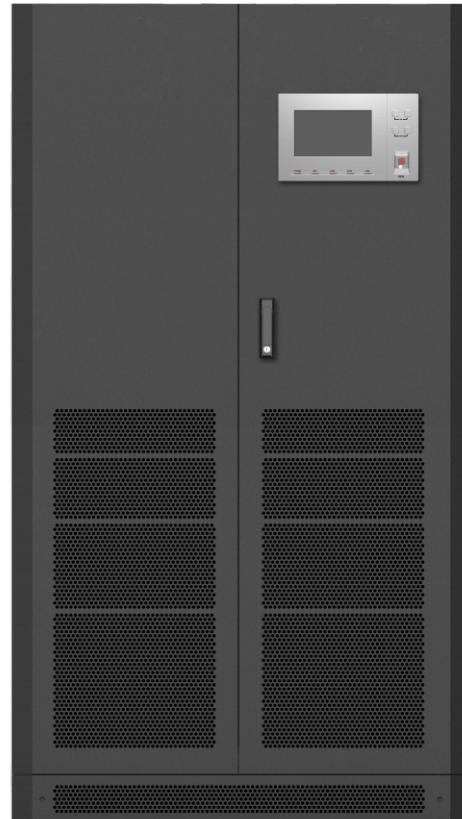
Low Frequency On-line UPS (3 Ph in/3Ph out)



## Power Protection for Business-Critical Continuity

# MP98B 10-600kVA

High-end intelligent power protection solution



## ■ Information Technology

- Data centers
- Server (LAN, WAN, MAN, ERP, e-mail, web and others)
- Networking

## ■ Telecommunication

- Mobile (2G, 2.5G, 3G)
- Paging
- Fixed (including WLL)

## ■ Industrial Automation

- Process (including instrumentation)
- Motion (digital drives and robotics)

## ■ Transport Automation

- Airport automation and flight booking
- Other including railways and road transport automation and ticket booking

## ■ Banking, Insurance and Financial Service

## ■ Software Development Houses

- Software Technology Parks (STP)

## ■ Building Automation

- Acces Control
- Security System
- Fire Alarm System
- Emergency Lighting
- Other Critical Applications

## ■ Medical Diagnostics

- Magneto Resonant Imaging
- CT Scanning
- CathLab

## ■ Satellite

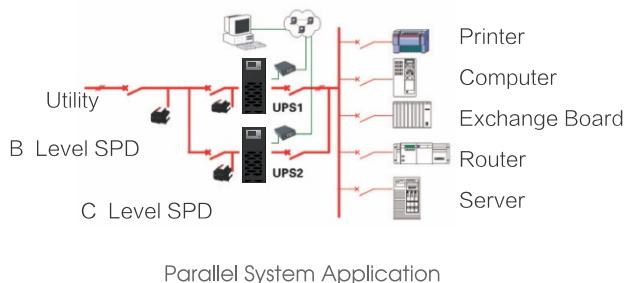
- Uplinking
- Earth Stations

# MP98B

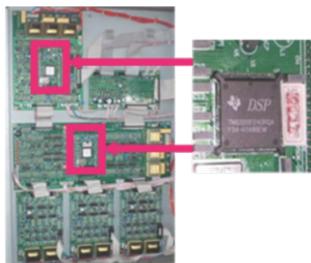
# High Intelligent Power Protection Solution

MP98B series UPS is Arakawa's historic UPS, it brings a new choice for your critical applications. Thanks for 20 years of research and development experience, MP98B series UPS can be applied to wide application solutions as they possess high cost-effective advantages. With optional dual mains input and a built-in maintenance bypass switch, the system's stability is high increased. Featuring with upgraded IP grade, replaceable filter screens and back-feed protection, MP98B series UPS satisfies your demands of industrial environment. In addition, customization products are available for special requirement.

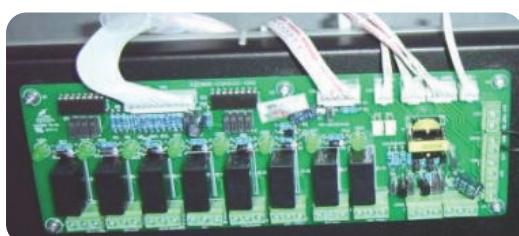
## Features and Advantages



Parallel System Application



Double DSP and full digital control



8+6 dry contact communication signals

### High reliability

1. Standard output isolated transformer
2. 3 x 2 redundant power design
3. No-master-slave N+1 parallel technology  
(Maximum 6pcs in parallel in real application)
- 4 PCB boards feature with anti-corrosion paint coating

### High performance

1.  $\pm 25\%$  input Voltage
2. 40-70Hz Frequency (Mains)
3. Double DSP and full digital control
4. International IGBT power modules
5. Allow 100% three phases unbalanced load

### Maximum protection

1. Overload protection
2. Reverse polarity protection
3. High input voltage protection
4. High/Low output voltage protection
5. Short-circuit protection
6. Over temperature protection
7. Battery overcharge protection

### Smart management

1. Intelligent RS232/Rs485
2. Battery management
3. Multi-function settings to view parameters
4. 1000pcs events logs
5. 8+6 dry contact communication signals

# MP98B

# High Intelligent Power Protection Solution

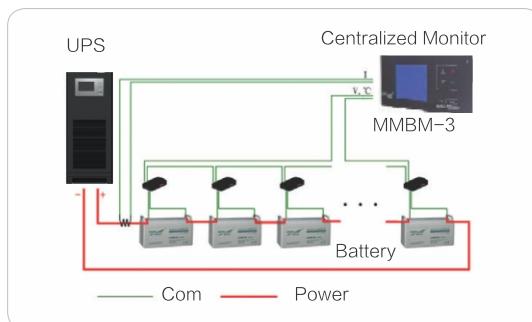
## Added-value Service and Customization



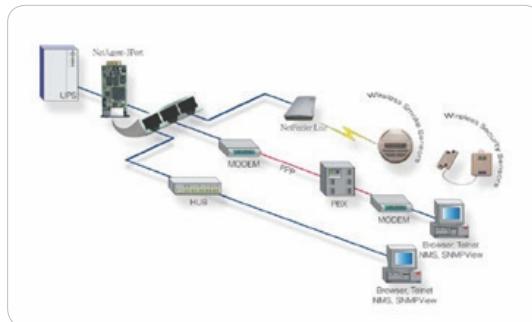
Filtering Screen



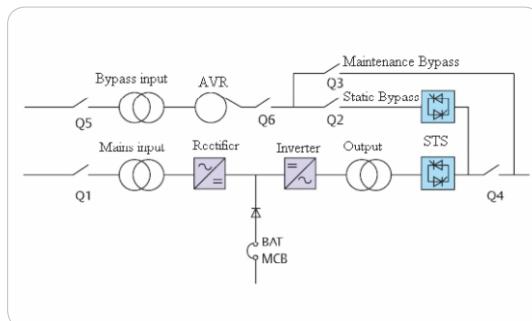
Interactive Touch Screen



Intelligent Battery Management System



Flexible Network Management



Customized Design Structure

### Harsh industrial environment

1. Strong enclosure
2. Shield box protection  
Control boards can be dust-proof and anti-interference
3. Replaceable  
Prevent dust and debris from affecting ups performance
4. IP31'  
Prevents liquids and debris from entering the UPS

### Intelligent battery monitor system - MMBM-3

1. Real time monitoring parameters
2. Smart diagnosis status
3. Real time abnormal alarm
4. Record and save events logs

### Flexible network management

1. Fancy touch screen
2. Optional SNMP adapter
3. Emergent alarm via SMS/Email
4. ModBus for remote management

### Customized Design

1. External bypass cabinet
2. Input/ Bypass isolation transformer
3. 12 Pulse rectifier & Active/ Passive filter
4. Temperature compensation sensor
5. Energy reverse absorber for industrial applications  
(Back-feed protection)



## MP98B Series Technical Specifications

Model	MP98B 10-160kVA										
	10 KVA	15 KVA	20 KVA	30 KVA	40 KVA	50 KVA	60 KVA	80 KVA	100 KVA	120 KVA	160 KVA
INPUT											
Voltage(Vac)	380/400±25%										
Rectifier Frequency(Hz)	40~70										
SYNC Frequency Tracking(Hz)	50/60±5% (±10% optional)										
Phase	3Ø 4W+PE										
Dual mains input	Optional										
OUTPUT											
Capacity (KVA/KW)	10/9	15/13.5	20/18	30/27	40/36	50/45	60/54	80/72	100/90	120/108	160/144
Power Factor	0.9										
Phase	3Ø 4W+PE										
Voltage (Vac)	L-N: 220/230±1%, L-L: 380/400±1%,										
Frequency(Hz)	50/60±0.5% (battery mode)										
Waveform	Pure sine wave, THD≤3%(linear load)										
3 Phases 100% Load Unbalance Voltage Stability	≤2%, allow 100% unbalance										
Efficiency (AC-AC)	92%										
Overload	<105% long time working, 105%~130% load for 10 min, 131%~150% load for 1min.										
BATTERY											
Voltage (Vdc)	12V×29=348										
BATT Type	External										
Charging Current(A)	10~40A setting										
Battery Self-testing	Automatically alarm and estimate battery status in battery abnormal status										
OTHER											
Maintenance Bypass	Yes										
Communication Interface	RS232/RS485 and dry contact (MODBUS and SNMP adapter are optional)										
Display	LCD Display indicates frequency, voltage, load, battery voltage, etc. LED indicates running status										
Alarm	Overload, abnormal AC input, low battery, UPS failure										
Protection	Low battery, overload, over temperature, short circuit, output over voltage, output low voltage										
Noise (dB)	< 65										
Protection Class	IP20 (IP31 optional)										
Approvals	CE (EN 62040-2, IEC 62040-1)										
Working Temperature	0 ~ 40°C										
Relative Humidity	0 ~ 95%, No condensation										
Dimension (W × D × H) (mm)	500 × 800 × 1180				800 × 800 × 1600				1000 × 800 × 1800		
Weight(Kg)	200	220	240	290	450	470	490	690	725	775	905

◆ Specifications are subject to change without prior notice.





## MP98B Series Technical Specifications

Model	MP98B 200-600kVA				
	200 KVA	300 KVA	400 KVA	500 KVA	600 KVA
INPUT					
Voltage(Vac)	380/400±25%				
Rectifier Frequency(Hz)	40~70				
SYNC Frequency Tracking(Hz)	50/60±5% ( $\pm 10\%$ optional)				
Phase	3 $\phi$ 4W+PE				
Dual mains input	Optional				
OUTPUT					
Capacity (KVA/KW)	200/180	300/270	400/360	500/450	600/540
Power Factor	0.9				
Phase	3 $\phi$ 4W+PE				
Voltage (Vac)	L-N: 220/230±1%, L-L: 380/400±1%,				
Frequency(Hz)	50/60±0.5% (battery mode)				
Waveform	Pure sine wave, THD $\leq 3\%$ (linear load)				
3 Phases 100% Load Unbalance Voltage Stability	$\leq 2\%$ , allow 100% unbalance				
Efficiency (AC-AC)	92%				
Overload	<105% long time working, 105%~130% load for 10 min, 131%~150% load for 1min.				
BATTERY					
Voltage (Vdc)	12V $\times$ 32=384				
BATT Type	External				
Charging Current(A)	10~100A setting				
Battery Self-testing	Automatically alarm and estimate battery status in battery abnormal status				
OTHER					
Maintenance Bypass	Yes				
Communication Interface	RS232/RS485 and dry contact (MODBUS and SNMP adapter are optional)				
Display	LCD Display indicates frequency, voltage, load, battery voltage, etc. LED indicates running status				
Alarm	Overload, abnormal AC input, low battery, UPS failure				
Protection	Low battery, overload, over temperature, short circuit, output over voltage, output low voltage				
Noise (dB)	< 75				
Protection Class	IP20 (IP31 optional)				
Approvals	CE (EN 62040-2, IEC 62040-1)				
Working Temperature	0 ~ 40°C				
Relative Humidity	0 ~ 95%, No condensation				
Dimension (W $\times$ D $\times$ H) (mm)	1400 $\times$ 1000 $\times$ 1850	1600 $\times$ 1000 $\times$ 1850		3000 $\times$ 1000 $\times$ 1800	
Weight(Kg)	1280	1830	2050		4500

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