

Uninterruptible Power Supply M9950 (100, 120, 160, 200, 300, 400, 500, 600kVA)

The M9950 offers a true online double conversion, high performance, high density and high efficiency experience to users.

Designed with industry-leading power electronics and controls technology and incorporating innovative advanced multilevel conversion technology to create a 3-level output voltage which reduces switching loss.



Equipment Reliability

At 99.9995%, Mitsubishi Electric UPS achieve the highest equipment reliability among all UPS suppliers, ensuring you – and your customers – are protected against downtime 24/7/365.

High Efficiency

Our patented technology provides a true on-line double conversion UPS system that offers high efficiencies regardless of load type.

Efficiency ratings as high as >96%, even with loads as low as 40%.

Ease of Maintenance

Designed with both reliability and maintenance in mind, the various system components minimise and ease system maintenance. Front access allows for ease of access and reduced mean time to repair (MTTR). Components such as 15 year lifetime capacitor provide longer life and enhanced dependability.

Protect Mission Critical Equipment



Data Center



Financial Sector



Energy & Utilities



Hospital & Medical Institute



Transportation & Aviation



Telecommunications



Manufacturing & Industrial



Retail & Hospitality



Education & Research Institute

Specifications

Model	M9950							
Rated Output (kVA)	100	120	160	200	300	400	500	600
Rated Output (kW)	100	120	160	200	300	400	500	600
Design Topology	Online double conversion (VFI-SS-III), Transformerless Design							
Regulatory	Safety : IEC 62040 -1, EMC : IEC 62040 -2, Performance : IEC 62040 -3							
Power Expansion	Up to 8 units with advanced current mirror loop control for reliable parallel operation							
Surge Protection	Built-in modular type II surge protection							
Emergency Power Off (EPO)	Available in front panel							
Cable Entry	Bottom				Top & Bottom			
Protection Class	IEC-IP-20							
Input Characteristics								
Converter Technology	Robust CSTBT based multi-level Technology, High Efficiency & Long life							
Nominal Voltage	3 Phase 380/400/415 V + PE							
Voltage Tolerance	+15%, -20%							
Frequency	50 Hz \pm 10%							
Power Factor	> 0.98 @100% load							
Current Distortion (THDi) @ rated load	< 5% @100% load							
System Power Walk in	30 secs programmable and up to 3600 secs programmable converter start delay							
Output Characteristics								
Inverter Technology	Robust CSTBT based multi-level Technology, High Efficiency & Long Life							
Nominal Voltage	3 Phase - 4 Wire 380/400/415 V (selectable)							
Frequency	50 Hz							
Frequency Sync Range	\pm 1% to \pm 5% (Selectable in 1% increment)							
Frequency Slew rate	1 Hz/s to 5 Hz/sec (Selectable in 1 Hz/sec increment)							
Phase displacement	\pm 1 Deg @ 100% balanced load, \pm 3 Deg @ 100% unbalanced load							
Power Factor	Unity							
Voltage Regulation Static Load	< 1%							
Dynamic Response (100% Step Load)	< 2%, recovery within 20ms							
Voltage Distortion (THDv) @ rated load	< 2% (Linear load), < 5% (Non-linear load)							
Overload	125% for 10 Minutes, 150% for 1 Minute							
Bypass Characteristics								
Nominal Voltage	3 Phase -4 Wire 380/400/415 V \pm 10%							
Nominal Frequency	50Hz							
Short Circuit withstand capacity	500% for 20ms							
Battery								
Nominal Voltage	480 VDC (Flexible)							
Max DC voltage protection	Up to 700V DC							
Battery Type	VRLA, Flooded, Ni-Cd, LIB							
Efficiency								
Double Conversion Mode	Up to 96.6%							
Communication								
Intelligent monitoring (option)	Modbus/TCP, Modbus/RS485, RS 232, SNMP							
UPS Display	Graphical Touchscreen with LCD Display							
Alarm and Status Information	Through LCD Display, user programmable input and output dry contacts							
Environmental								
Operating Temperature	0 to 40 °C							
Relative Humidity	30 to 90% no condensation							
Operating altitude measurement	1000m above msl							
Dimension								
Dimension (W x D x H) ¹	700 x 832 x 2080 ²		700 x 832 x 2080 ²		1400 x 832 x 2080 ²		1800 x 832 x 2080 ²	
Weight (kg)	550	550	610	610	990	1100	1590	1650

Specifications are subject to change without prior notice as part of continuous development.

1-Dimension tolerance +/-10mm

2-Top entry is optional on request

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