

>9700UPS

UNINTERRUPTIBLE POWER SUPPLIES





Superior Performance, Reliability and Safety Come from Experience. Our Uninterruptible Power Supply Systems Ensure All Three.

Mitsubishi Electric has been developing and manufacturing Uninterruptible Power Supply (UPS) components and systems for more than three decades. That experience, and the continuous application of new power-device technologies to further improve products in the industry clearly explain why Mitsubishi Electric has dominated a large portion of the world UPS market for years.

When purchasing a UPS system, the key word is "dependability." And there's one company that many rely on. Uninterruptible Power Supply systems by Mitsubishi Electric.

IGBT - Transistors with Excellent Performance Characteristics

Mitsubishi Electric is the leading manufacturer of Insulated Gate Bipolar Transistors (IGBTs), and now utilizes IGBTs in the converters and inverters of its 9700 Series UPS systems. These advanced, high-performance transistors provide a variety of intelligent features.

- High Ampacity Transistors (600A)
- High Speed Switching
- Low Control Power

Low Input Current Harmonics (THD)

- 3% maximum (100% load)
- 4% maximum (75% load)
- 5% maximum (50% load) (No additional filtering required)

Input Power Factor

- 0.99 typical (0~100%)
- 1:1 Ratio (No oversizing of generator)

Benefit of Lower Input Current

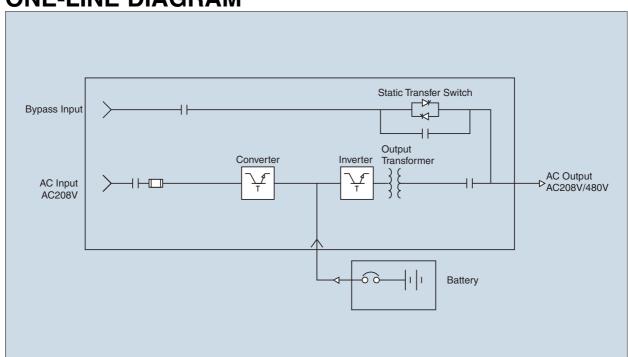
 Smaller upstream components (Transformers, Circuit Breakers and cable sizing)

Low Heat Loss/High Efficiency

Use of IGBTs transistor enables efficient high-speed switching (6kHz), thus reducing heat dissipation in the UPS. (Higher efficiency means lower cost per kilowatt and lower cost of ownership.)

ishi – The Leader in UPS Technology, Quality & Reliab

ONE-LINE DIAGRAM





What is DiamondLink™?

DiamondLink is user-customizable power monitoring, management and shutdown software, designed to provide information about the power condition of the UPS system.

How does DiamondLink work?

DiamondLink is designed to run on network server or workstations in any office environment. The software will monitor the status of your UPS and, when critical events occur, will perform a graceful unattended shutdown.

Features

- Automatic unattended shutdown
- · Smart messages can be user-defined
- User-defined actions for a specific list of power-events
- Color coded power event logging
- · Built-in graphing routines allow customized graphs to be created on-line
- DiamondLink can be used with all Mitsubishi single-phase and three-phase products

Specifics

- Power history graphs
- Custom user defined events
- Data log viewer
- E-mail configurations
- E-mail options for power events
- Event action
- Events log file
- Modem alert notification
- Pager notification
- Paging option

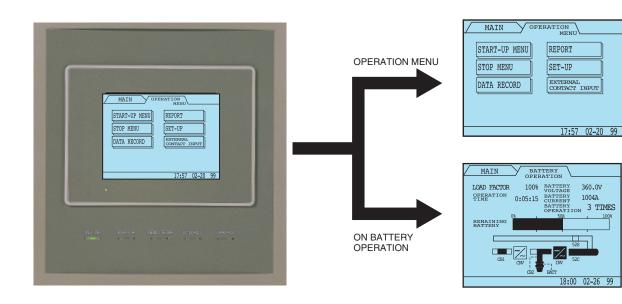
Supported Operating Systems

- Microsoft Windows
- Microsoft Windows NT
- Microsoft Windows '95
- Microsoft Windows '98
- Microsoft Windows '00Microsoft Windows XP
- OS/2
- Novel NetWare®
- SVR4

- SCO UNIX
- SCO XENIX
- Solaris[™]
- IBM® AIX®-RS/6000™
- HP-UX
- SGI
- Digital UNIX
- Red Hat (LINUX)







Extended Battery Life (0-100% Load Step)

 Supplemental current from the batteries is no longer required with the installation of IGBTs transistor in both the converter and inverter. Other UPS systems require assistance from the battery during step load conditions. The additional battery cycling results in decreased battery life.

Isolated Redundant System Capability

- The 9700 Series is designed for isolated redundant applications.
- Lower cost to consumer, small footprint, less components.
- Different kVA sizes and different series can be used for greater flexibility of the overall system.

Operator-Friendly Control Panel

Features:

- Mimic bus diagram
- Operator's control station
- Touch panel input

LCD monitor displays:

- System metering
- Menu-driven start-up procedures
- Menu-driven operation procedures
- History of events
- Trend graph

Additional features:

- Password locked for start/stop operation
- Sealed EPO button

Realtime Battery Monitoring

- Remaining time in battery charge displayed for operator
- Software algorithms continuously calculate and update actual remaining time in battery charge.

Superior Functions

- Automatic restart
- Automatic retransfer
- Converter walk-in function
- Battery monitoring
- Ripple-free DC output (rectifier)
- 1-set "Form A" dry contracts of selectable items
- Large overload/overcurrent capacity
- Battery temperature compensation
- Adjustable DC cut-off

Quiet Operation

100kVA → 63dB (A scale, 1m)

360.0V

 150 - 225kVA→ 65dB (A scale, 1m)

Software

- RS-232C parallel interface
- Multiple server shutdown software (V. 1.50)
- DiamondLink application software
- 90% of all operating systems are compatible with DiamondLink
- Multilingual
- Paging, E-mail capability during power events
- Auto-dial
- Ethernet LAN connection interface (optional)
- SNMP Interface

Standard warranty is two years, including parts and labor.

(NOTE: All information subject to change without prior notice.)

GSA Contract Number

GS-07F-9526G



2008 Nemertes Award Winner for "Best Small Business Provider for Power Systems"

SPECIFICATIONS

UPS Cabinets

kVA/KW	208 V/208 V Dimensions (W x D x H) (inch)	Weight (lbs)	
100/80	35.4 x 29.9 x 79.7	1,900	
150/120	47.2 x 29.9 x 79.7	2,350	
225/180	55.1 x 29.9 x 79.7	3,300	

Note: Batteries not included.



Specifications: 9700 Series 100kVA - 225kVA

Rated Output kW 80 120 180	Rated Output kVA	100	150	225	
AC INPUT CHARACTERISTICS 3 phase, 3 wire 208V +10%15% Input Power Factor 0.98 Typical Frequency 60 Hz ±5% 80 Hz ±5% 8	<u> </u>				
Configuration 3 phase, 3 wire Voltage 208V +10% - 15% Input Power Factor 0.98 Typical Frequency 60 Hz ±5% Reflected Current THD 3% max. at 100% load; 5% max. at 50% load STATIC BYPASS INPUT Configuration 3 phase, 3 or 4 wire Voltage 120/208V ±10% Frequency 60 Hz (x3% Tracking window) BATTERY YPVE VRLA, Flooded Lead Acid, Nickel Cadmium Ride Through Application specific Nomland Voltage 360 VDC Minimum Voltage 290 VDC Number of Cells 176 ~ 185 AC OUTPUT 3 phase, 3 or 4 wire Voltage 120/208V Voltage Stability ±1% Frequency 60 Hz Frequency 60 Hz Prequency Stability ±1% Power Factor 0.8 normal Power Factor Range 0.8 - 1.0 lagging (within output kW rating) Voltage ThD 2% maximum ThD at 100% load step; ±1% maximum 1 loss or return of AC power ±5% maximum at 100%	·	00	120	100	
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Cooling Forced air Operating Temperature 32°F ~ 104°F (0°C ~ 40°C). Recommended 68°F ~ 86°F (20°C ~ 30°C) Relative Humidity 5% ~ 95% non-condensing	Withstand Rating	65kA; with optional fuses			
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Relative Humidity 5% ~ 95% non-condensing	Cooling	Forced air			
·	Operating Temperature	32°F ~ 104°F (0°C ~ 40°C). Recommended 68°F ~ 86°F (20°C ~ 30°C)			
Altitude 3300 feet (1000 meters); 5000 feet at 0.99 derating	Relative Humidity	5% ~ 95% non-condensing			
	Altitude	3300 feet (1000 meters); 5000 feet at 0.99 derating			



Mitsubishi Electric Power Products, Inc.
Uninterruptible Power Supplies (UPS) Division
547 Keystone Drive
Warrendale, PA 15086

Phone: 724-772-2555

MK-00006R-REV #1 • February 2009

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