MITSUBISHI ELECTRIC
UNINTERRUPTIBLE POWER SUPPLIES

9900A

>9900AUPS

UNINTERRUPTIBLE **POWER** SUPPLIES

9900A

SERIES

>9900AUPS

Mitsubishi applies the most advanced technologies available so that the 9900A UPS will produce the most reliable protection for your equipment. What are the benefits you can expect?

EXCEPTIONAL EFFICIENCY

This new, high efficiency UPS delivers superior performance with up to 96.5% system efficiency. This 3-phase, true on-line, double conversion system can dramatically reduce the energy loss, resulting in substantial cost savings of the UPS system and cooling needs.

RELIABILITY AND ADAPTABILITY

Parallel control circuitry, system static bypass and control circuitry reside in each individual UPS Multi-Module System, optimizing control redundancy and eliminating common control single points of failure. The 9900A UPS Module can be utilized in single modular system (SMS) or multi-modular system (MMS). This allows for a highly reliable and flexible system approach.

COST SAVING SCALABILITY

The 9900A is our most compact and light-weight UPS to date. The design will allow our customers to save on precious data center floor space, and can essentially realize significant cost savings.

OPEN ARCHITECTURE

Our 9900A system provides a variety of communication methods with features that make the product inherently easy to use and maintain.

SUPERIOR PERFORMANCE

The 9900A uses the most advanced IGBT and highly developed control methods which delivers optimum system specification and characteristics.

WARRANTY

The 9900A UPS comes equipped with a 3 year standard warranty.

The 9900A UPS system uses the most advanced IGBT in both the converter and inverter with Digital Signal Processor (DSP) applied Direct Digital Control (DDC). This unique combination simply means our 9900A UPS offers superior reliability and the most efficient system in the industry.

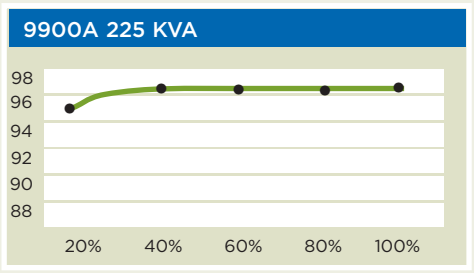
KVA	INPUT	OUTPUT	OUTPUT PF	DIMENSIONS (WXDXH)	LBS	PARALLEL CAPABILITIES	DC
80	480 VAC	480 VAC	0.9	27.6" X 32.8" X 80.6"	855	UP TO 4 MODULES	480 VDC
100	480 VAC	480 VAC	0.9	27.6" X 32.8" X 80.6"	855	UP TO 4 MODULES	480 VDC
150	480 VAC	480 VAC	0.9	35.4" X 32.8" X 80.6"	1,160	UP TO 4 MODULES	480 VDC
225	480 VAC	480 VAC	0.9	35.4" X 32.8" X 80.6"	1,230	UP TO 4 MODULES	480 VDC

RELIABILITY 3 year warranty

up to 96.5% system efficiency

EFFICIENCY

At Mitsubishi Electric Power Products, Inc., we understand that in today's high-speed, digital world, critical load downtime can cost your company millions of dollars. That is why we have developed the 9900A UPS – our most innovative and efficient UPS.



TYPICAL TEST RESULTS

STANDARD FEATURES

> Fully Digital, IGBT Converter and Inverter
> Advanced Circuit Topology and Pulse Width Modulation (PWM)
> Parallel up to Four (4) Modules
> Front Access UPS
> Small Footprint and Weight
> UL 1778 Listed

AC INPUT

> 480VAC 3P, 3W, 60 Hz
> +15%, -20% Voltage Range
> <3% THD @ 100% Load
> Power Factor: .99
> Surge Withstand: meets IEEE, 587. ANSI C62.41-1991

DC LINK VOLTAGE

> 480 V

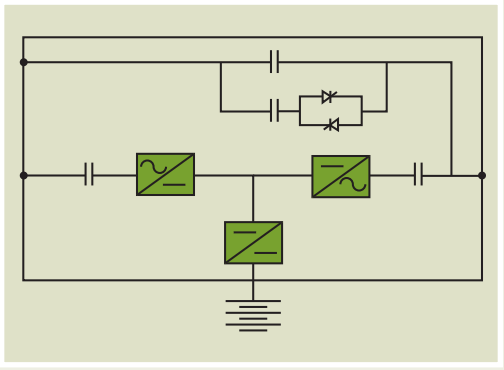
AC OUTPUT

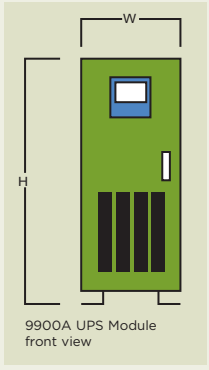
> 480 VAC 3P, 3W, 60 Hz
> Power Factor: 0.9
> Voltage Accuracy: +/- 1%
> Transient Recovery Time: 20 Milliseconds
> Step Load (100%): +/- 2%
> Voltage THD: 2% Maximum @ 100% Linear Load
> Overload: 125% for 2 Minutes, 150% for 1 Minute
> EMI Compatibility: FCC Article 47, Part 15 Subpart B

OPERATING ENVIRONMENT

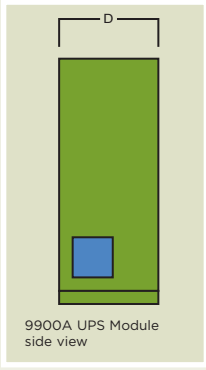
> Audible Noise: 70dB @ 1 Meter
> Temperature: 0–40°C
> Relative Humidity: 5–95% (Noncondensing)
> Altitude: 0–7,400 ft.

9900A ONE LINE DIAGRAM





9900A UPS Module front view



9900A UPS Module side view

Mitsubishi Electric Customized IGBT Module

Mitsubishi Electric is the leading manufacturer of Insulated Gate Bipolar Transistors (IGBT). Customized IGBT modules are utilized in the 9900A Series UPS Systems. These advanced, high-performance transistors provide a variety of intelligent features:

> *Large Power Capabilities*
> *High Speed Switching*
> *Low Control Power Consumption*
> *Low Switching Loss*

IGBT has become the preferred power device for UPS systems, but it is how the IGBT power device is controlled that is key to achieving optimum UPS performance.

IGBT

REDUCED FOOTPRINT

ultimate flexibility

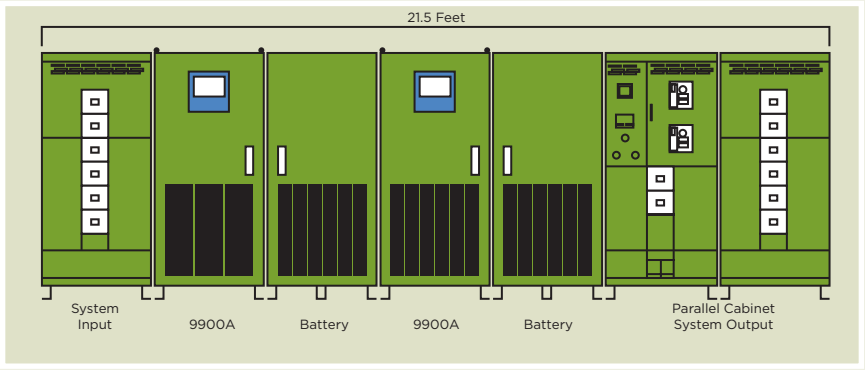
PARALLEL

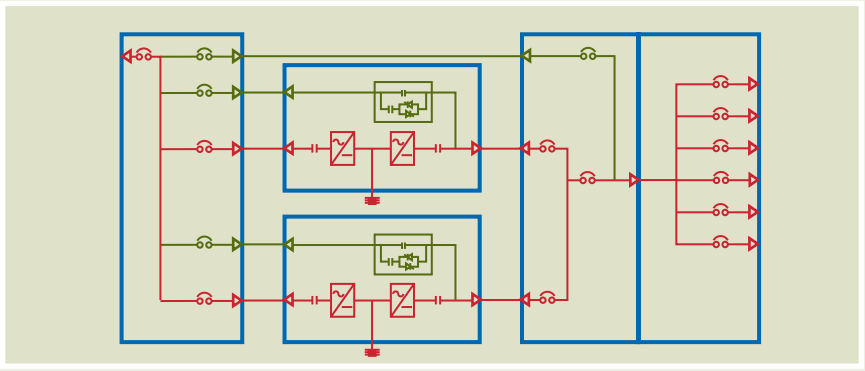
9900A UPS MULTI MODULE SYSTEM (MMS) LINE UP

The Mitsubishi 9900A Multi-Module System (MMS) incorporates individual parallel control and static bypass circuitry in each independent UPS Module. Our 9900A MMS therefore offers complete system redundancy, reliability and flexibility with cost saving scalability and a reduced footprint.

SYSTEM INPUT

TYPICAL 2 X MMS CONFIGURATION





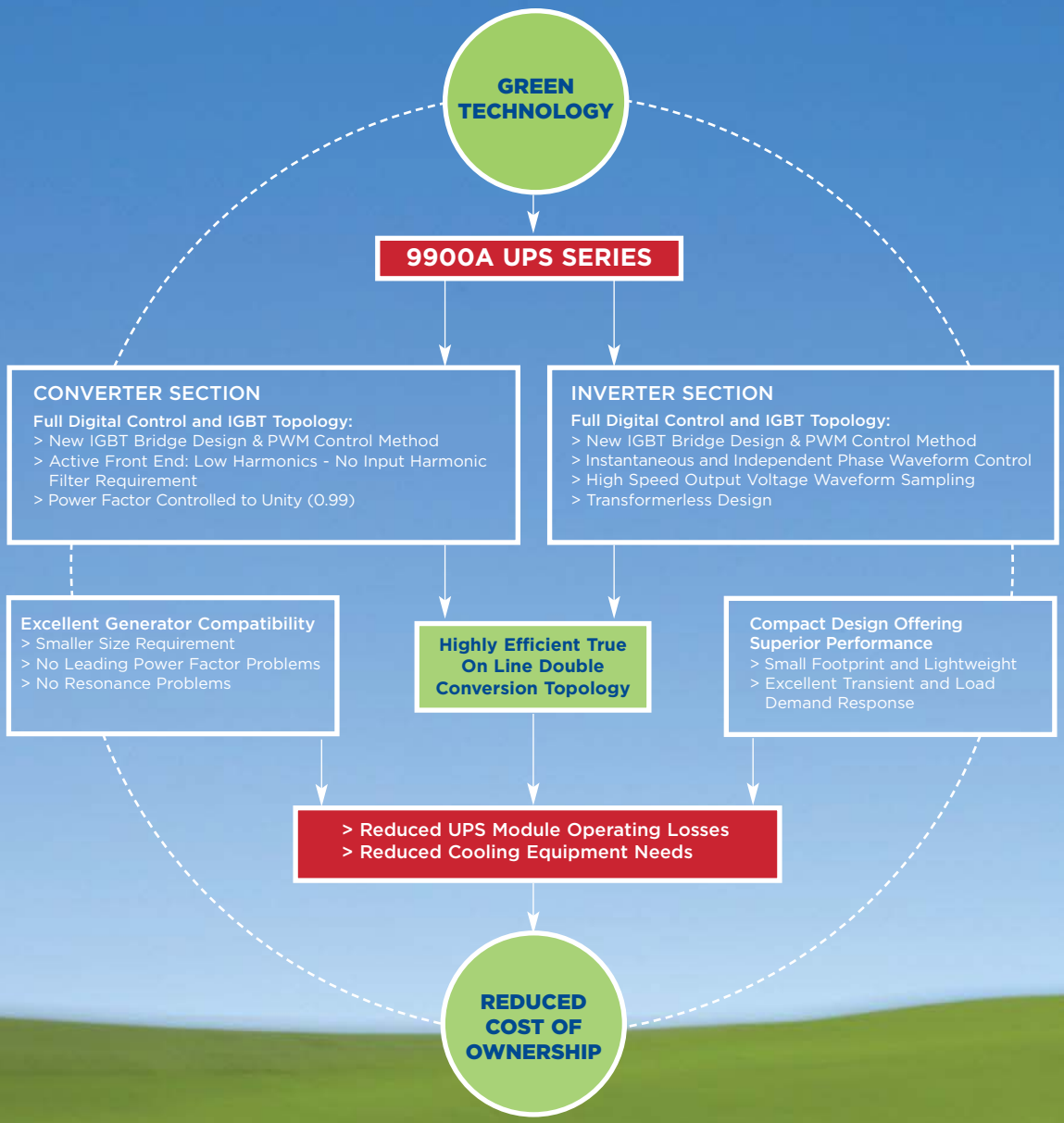
Note: Dimensions dependent on system design and configuration.

Mitsubishi 9900A MMS features include:

- *Up to 4 UPS Modules in Parallel*
- *Cross Current Sensorless Control*
- *System Operation and Monitoring from any UPS Module*
- *UPS Module Adaptable for MMS or SMS Operation*
- *Customizable Input and Output Distribution*
- *System Load Bank Test Circuit (Optional)*
- *Parallel for Redundant or Capacity System Configuration*

>The Power of Green

The vision of Mitsubishi is to continuously produce value add products instilled with ingenuity and breakthrough technologies. This vision brings you the 9900A series, our most efficient, smallest footprint and lightweight UPS product line up.



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

www.meppi.com

MITSUBISHI ELECTRIC
UNINTERRUPTIBLE POWER SUPPLIES