

> **2033G**UPS

UNINTERRUPTIBLE  
**POWER SUPPLIES**

30KVA, 50KVA



2033G

Available in 30kVA and 50kVA, the 2033G delivers the reliable power and protection Mitsubishi customers have come to expect. Its transformerless design and excellent performance characteristics differentiates the 2033G Series UPS from others in the industry.



SERIES

# >2033GUPS

Mitsubishi Electric, a leading manufacturer of Uninterruptible Power Supplies (UPS) and systems, has been providing patented UPS technology to the world's markets for more than four decades. During that time, Mitsubishi UPS have continually set benchmarks for quality, reliability and performance. The Series 2033G UPS is engineered to carry on the Mitsubishi standard of excellence by offering the following features and benefits:

**INTELLIGENT PERFORMANCE/  
PRECISION CONTROL**

Use of customized IGBTs results in ultra-high performance for the Series 2033G UPS. It is designed to protect critical loads in a variety of environments. Its light weight and small footprint make the Series 2033G UPS the ideal choice when specifying product in 30 and 50kVA power ranges.

**EXTENDED BATTERY LIFE**

Power draw from batteries during step load conditions is no longer required with the IGBT in both the converter and the inverter. Other UPS systems required assistance from batteries when the converter was unable to supply the required current. This cycling of batteries causes shorter life. Mitsubishi Electric IGBTs incorporate the latest technologies and provide step load applications (0-100%) without the use of batteries, thus ensuring maximum battery service life (i.e., lower lifetime cost of UPS system).

**QUIET OPERATION**

- > 30kVA–60dB (A Scale, 1m)
- > 50kVA–63dB (A Scale, 1m)

**SUPERIOR FUNCTIONS**

- > Front Access Only
- > Automatic Restart after Low Battery Inverter Stop
- > Automatic Retransfer
- > Converter Walk-in Function
- > “Form A” Dry Contacts
- > High Tolerance for Overload/Overcurrent
- > Battery Current Limit
- > Battery Self-test

**INPUT POWER FACTOR**

- > 0.98

KVA	208V TO 208V DIMENSIONS (WXDXH)	208V TO 208V (LBS)	480V (OR 600V) TO 208V DIMENSIONS (WXDXH)	480V (OR 600V) TO 208V (LBS)	480V TO 480V* DIMENSIONS (WXDXH)	480V TO 480V* (LBS)
30	27.6" X 31.5" X 59.1"	569	51.1" X 31.5" X 59.1"	1,957	51.1" X 31.5" X 59.1"	2,242
50	27.6" X 31.5" X 59.1"	648	55.1" X 31.5" X 59.1"	1,842	55.1" X 31.5" X 59.1"	2,252

\*Same for 600V input / 600V output

RELIABILITY  
2-year-warranty

quality systems

# HIGH PERFORMANCE

## TOUCH SCREEN DISPLAY ALLOWS USER TO ACCESS:

- > Input/Output Voltage
- > Input/Output Current
- > KW
- > Frequency
- > Battery Information
  - Voltage
  - Remaining Battery Power
- > Diagnostics
  - Fault/Alarm History

## SOFTWARE

- > RS-232C Serial Interface (Standard)

## STANDARD FEATURES

- > IGBT (Converter/Inverter)
- > UL1778/cUL Listed
- > UL924 Listed
- > Conformally Coated Boards (Industrial Environment)
- > Front Access Only (Serviceability)
- > “DiamondSense” Battery Self-test

## BATTERY DC LINK

- > 432 VDC (367–491 VDC)

## OPTIONS

- > Seismic Bracing Brackets
- > 480V Input (External Matching Cabinet)
- > Software (for Specific O/S Systems)
- > DiamondLink Application Software (Optional)
  - Multilingual
  - Paging, E-mail Capability during Power Events
  - SNMP Interface (NETCOM)

## OPERATING ENVIRONMENT

- > Temperature: 0–40°C
- > Relative Humidity: 5–95% (Noncondensing)
- > Altitude: 0–7,400 feet (No Derating)

## AC INPUT RATING

- > +15%–25%
- > Power: Rated 1kVA : 1kW Generator
- > 208Y/120 VAC
- > THD (Reflected Current):
  - 4% Typical (100% Load)
  - 7% Typical (50% Load)
- > 3-Phase, 4-Wire, plus Ground
- > Frequency: 60 Hz ( $\pm 5\%$ )
- > Surge Withstand: meets IEEE C62.41-1991
- > EMI Compatibility: FCC Title 47, Part 15 Subpart B

## AC OUTPUT RATING

- > 3-Phase, 4-Wire, plus Ground
- > 208Y/120 VAC
- > Output Power Factor Rating: 0.8–1.0 Lag (Within Output kW Rating)
- > Frequency: 60Hz  $\pm 0.01\%$  (Free Running)
- > Voltage Accuracy:  $\pm 1\%$
- > Transient Recovery Time: 16.7 Milliseconds
- > Nominal Dynamic Voltage Regulation:  $\pm 2\%$  for Unbalanced Load
- > Step Load Change: 0–100% 5%
- > Load/Return of AC Power: 2% (at 100% Load)
- > UPS Load Transfer, Bypass: 5% (at 100% Load)
- > THD (Voltage): 2% (100% Linear Load); 5% (100% Non-linear Load)
- > Slew Rate: 2Hz/sec (Selectable)

## WARRANTY

Standard warranty is two years, including parts and labor.



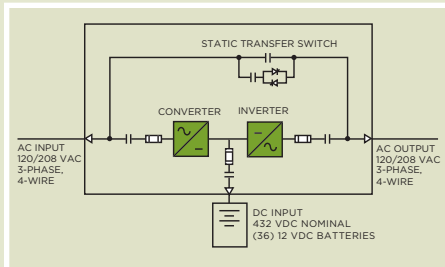
## Mitsubishi Electric Customized IGBT Module

Mitsubishi Electric is the leading manufacturer of Insulated Gate Bipolar Transistors (IGBT). Mitsubishi Electric utilizes IGBTs in the converter and inverter sections of our 2033G Series UPS systems. These advanced, high performance transistors provide a variety of intelligent features:

- > Large power capabilities
- > High speed switching
- > Low control power consumption

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.

## 2033G ONE LINE DIAGRAM



IGBT

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

[www.meppi.com](http://www.meppi.com)



UNINTERRUPTIBLE POWER SUPPLIES