

MPU32A series

30W Desk Top Type
Medical Power Supplies

Features:

- Wide Operating Voltage 90 to 264 VAC, 47 to 63 Hz
- IEC-320-C18 Input Inlet
- Single Output
- Over Voltage and Over Load protection
- ANSI/AAMI ES 60601-1: 2005(UL/cUL 3rd Edition)
EN 60601-1:2006 (TUV/T-mark 3rd Edition)
- Input to Output : 2MOPP
- Energy Star 2.0, Efficiency level V
- Class II
- 3 year warranty



Electrical Characteristics:

| | | | |
|-------|--------------------------------------|--|------------------|
| Vin | Safety Approvals Input Voltage Range | | 100~240VAC |
| | Operate Voltage Range | | 90~264VAC |
| fin | Input Frequency | | 47~63Hz |
| Po | Output Power Range | | See rating chart |
| Vo | Output Voltage Range | | See rating chart |
| Io | Output Current Range | | See rating chart |
| Iil | Input Current (Low Line) | Io=Full load, Vin=100VAC | 0.6A |
| Iih | Input Current (High Line) | Io=Full load, Vin=240VAC | 0.4A |
| Ir | Low Line Inrush Current | Io=Full load, 25°C, Cool start, Vin=115VAC | 28A (max.) |
| | High Line Inrush Current | Io=Full load, 25°C, Cool start, Vin=230VAC | 56A (max.) |
| Eff | Efficiency | Io=Full Load, Vin=230VAC | 73.5~85% |
| REG-i | Line Regulation | Io=Full Load | 1% (max.) |
| REG-o | Load Regulation | Vin=230VAC | 5% (max.) |
| OVP | Over Voltage Protection | | 112~132% |
| OCP | Over Current Protection | | 110~150% |
| Ttr | Time of Transient Response | Io=Full Load to Half Load, Vin=100VAC | 4mS (max.) |
| Th | Hold-Up Time | Io=Full Load, Vin=110VAC | 12mS (min.) |
| Ts | Start Up Time | Io=Full Load, Vin=100VAC | 0.3~2S |
| Vp-p | Ripple & Noise(Peak to Peak) | Full Load, Vin=90VAC | 1% (max.) |
| TC | Temperature Coefficient | All output | ±0.04%/°C |
| OA | Operating Altitude | | Up to 3000m |
| Pno | No-Load Power Consumption | No load, Vin=230VAC | See rating chart |
| Vps | Dielectric Withstanding Voltage | Primary to secondary | 6284VDC (min.) |

Note: The specifics for testing the energy efficiency of MPU32 Series are outlined in a separate document titled "Test Method for Calculating the Energy Efficiency of Single-Voltage External Ac-Dc and Ac-Ac Power Supplies (August 11, 2004)," which is available on the ENERGY STAR Website.

Environmental

| | | |
|------|---|-------------------|
| To | Operating Temperature | See derating crve |
| Ts | Storage Temperature | -40~85°C |
| Ho | Operating Humidity | 0~95% |
| Hr | Storage Humidity | 0~95% |
| MTBF | Operating Temperature at 25°C, Calculated per MIL-HDBK-217F | 0.1M Hrs (min.) |
| Pd | Derate linearly from 100% load at 50°C to 50% load at 70°C | |

Application:

- Blood Pressure system
- Portable medical devices
- ECG machine

Safety Approvals:



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Output Voltage And Current Rating Chart (Single Output) :

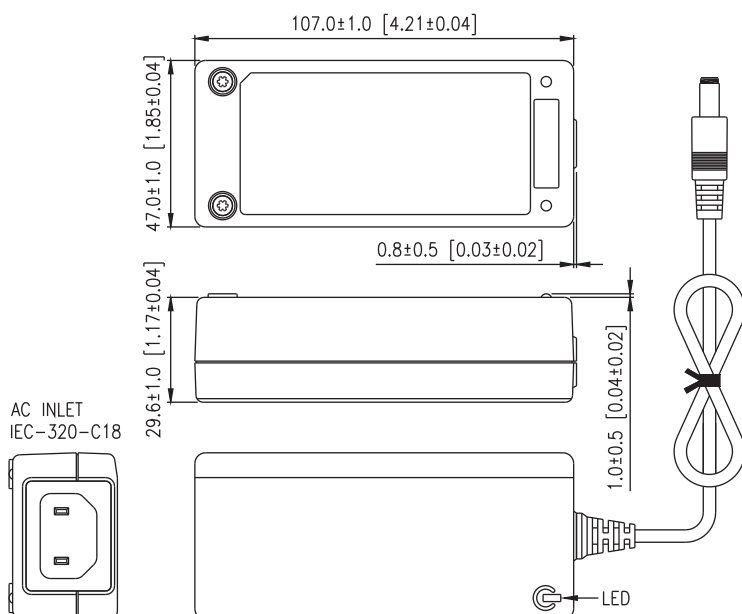
| Model Number | Output Voltage | Output Current | Total Regulation | Max. Output Power | Pno (max.) |
|--------------|----------------|----------------|------------------|-------------------|------------|
| MPU32A-102 | 5 ~ 6 VDC | 4.00 ~ 3.33 A | 5% | 20W | 0.3W |
| MPU32A-103 | 6 ~ 8 VDC | 3.83 ~ 2.87 A | 5% | 23W | 0.3W |
| MPU32A-104 | 8 ~ 11 VDC | 3.38 ~ 2.45 A | 5% | 27W | 0.3W |
| MPU32A-105 | 11 ~ 13 VDC | 2.74 ~ 2.30 A | 5% | 30W | 0.3W |
| MPU32A-106 | 13 ~ 16 VDC | 2.30 ~ 1.88 A | 5% | 30W | 0.3W |
| MPU32A-107 | 16 ~ 21 VDC | 1.88 ~ 1.43 A | 5% | 30W | 0.3W |
| MPU32A-108 | 21 ~ 27 VDC | 1.43 ~ 1.11 A | 5% | 30W | 0.3W |
| MPU32A-109 | 27 ~ 33 VDC | 1.11 ~ 0.91 A | 3% | 30W | 0.3W |
| MPU32A-110 | 33 ~ 40 VDC | 0.91 ~ 0.75 A | 3% | 30W | 0.3W |
| MPU32A-111 | 40 ~ 48 VDC | 0.75 ~ 0.63 A | 3% | 30W | 0.3W |

MPU32A-102~104 are required to use AWG#16/ 4FT output cable.

MPU32A-105~111 are required to use AWG#18/ 6FT output cable.

The regulation and efficiency will be changed by modified output cable.

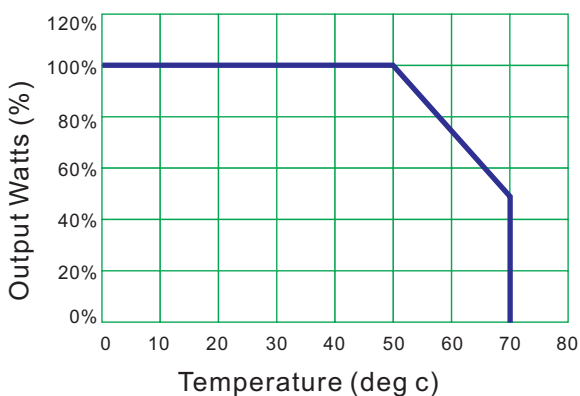
Mechanical Specifications:



Note:

1. Dimensions are shown in mm.
2. Weight: 265-280gs approx.
3. Optional output connector:
See page Appendix.

Derating Curve :



1. Operating Temperature: 0 to 70°C
2. Derate linearly from 100% load at 50°C to 50% load at 70°C