

ONEAC® ON Series® m Power Conditioned Medical-Grade UPS: For some, conventional UPSs are “good enough.” But many medical facilities find ordinary protection measures inadequate. They face performance expectations with no tolerance for downtime. ON Series m Power Conditioned UPSs comply with IEC60601-1 and are engineered to satisfy demanding medical applications.

Ultimate assurance of system reliability

All UPS makers acknowledge the broad range of power disturbances that compromise system reliability. And all address them to some degree. But here’s the difference — ONEAC’s proprietary power conditioning technology eliminates power problems entirely. Providing a level of protection that even the highest quality surge suppressor and filter technology cannot match.

When installed in systems as prescribed in IEC60601-1, ON Series Medical-Grade UPSs are uniquely suitable for clinical chemistry analysis systems and clinical information systems used in environments that require limited earth-leakage current.

Ease of regulatory compliance

Medical electronic equipment must meet strict electrical safety standards developed to protect the people and patients in these environments. ON Series Medical-Grade UPSs help manufacturers meet these standards and provide a clean electrical environment to ensure attached equipment has fewer system interruptions and hardware failures. This maximizes patient safety and the performance of patient contact equipment such as ultrasound, patient monitoring and clinical information systems.

Exceptionally dependable battery backup

We start with premium quality batteries. Thermally isolate them for maximum life. And employ unique charging circuitry attuned to the specific battery characteristics of each model to speed recovery and minimize stress on batteries. Automatic monitoring of battery condition ensures readiness. And our user replaceable battery pack allows rapid replacement without downtime, and without risk.



ONEAC’s low-impedance isolation transformer confines earth-leakage current to the secondary winding and provides a level of protection superior to surge suppressor and filter based systems — providing greater assurance of system reliability.



Proven durability, backed by a 5-year warranty

The robust design of an ONEAC UPS is impervious to the harshest electrical environments. Designed and manufactured under ISO 9001 quality procedures, ON Series m UPSs are exceptionally reliable. With an average mean time between failures more than twice as long as leading competitors. It’s no surprise, then, that we back our UPSs with greater confidence — 5 years on all power and control systems, 2 years on the battery sub-system.

- **Global Certifications:** UL1778, UL2601-1/60601-1, EN60601-1, CSA 22.2 listed
- **Full-time, on-line isolating transformer:** eliminates power contaminants
- **ONBoost®:** compensates for line sags and brown-outs, conserves batteries
- **On-site, on-line replaceable battery:** minimizes cost and downtime
- **Separately derived power source:** leakage current of the equipment, measured at the UPS line cord, is in compliance with UL2601.
- **Automatic self-test:** ensures battery and system readiness
- **Manufactured under ISO 9001:** assures consistent quality and performance
- **5-year warranty:** the best assurance of product quality and performance in the industry
- **Free 24-hour technical support**

ON Series m UPS: Specifications

Power conditioning

ONEAC's unique power conditioning architecture provides superior protection against the full range of power line disturbances. Components include:

Full output isolation: ONEAC's proprietary transformer designs provide superior protection against lightning and other high energy surges.

Low earth leakage currents: The secondary winding acts as a separately derived power source, thereby single or multiple loads with high earth leakage currents connected to the UPS have their earth leakage limited to that of the transformer. Typically less than 100 uA.

Virtual Kelvin Ground®: Eliminates the full spectrum of conducted power line noise (from 50 kHz to 10 MHz) in all modes, reduces the effect of electrostatic discharge (ESD) and provides an exceptionally clean, signal reference ground for electronic systems.

Communications

Basic mode provides standard signals recognized by ONEAC MopUPS® or UPS monitoring software supplied with Windows NT, NetWare and Banyan operating systems. Basic mode provides power fail and low battery signals for unattended system shutdown. It also receives inverter-off command to save remaining battery charge.

Global approvals

The ON Series m models meet FCC Class B requirements. "A" models are UL and cUL marked. "I" and "J" models are CE marked for compliance to the Low Voltage Directive (LVD) 73/23/EEC and Electromagnetic Compatibility (EMC) Directive 89/336/EEC. They are tested under the following standards:

Safety: UL 1778; UL2601-1/60601-1; and CSA22.2

EMC: IEC1000-2-2; EN50081-1; EN50082-1; EN50091-2; ENV50204; EN55011; EN55022; EN60601-1-2; EN61000-3-2/3; EN61000-4-2/3/4/5/6/11.

Performance characteristics

Nominal input voltage: 120 VAC, 50/60 Hz or 230 VAC, 50/60 Hz

Surge voltage withstand capability: ANSI/IEEE C62.41 Category A&B, 6 kV/200 & 500 Amp, 100 kHz ringwave

Surge voltage let-through (max): Less than 10 V Normal mode (L-N), less than 0.5 V Common mode (N-G) when subjected to 6 kV ANSI/IEEE C62.41 Cat. A

Normal & common mode clamping response time: Instantaneous

Transfer time (typical/max): 4/6 milliseconds


On-battery output voltage: Pseudo sine wave


ONBoost: Approximately 10% voltage boost to output voltage when input voltage falls below 80% of nominal

Load power factor range (crest factor): UPS .65 to 1.0 (3) — will support loads rated 0.5 to 1.0 (<5)

Batteries: Sealed, maintenance-free lead acid with a 3-6 year typical lifetime, hot-swap replaceable

Recharge time to 60% available capacity: 6-10 hours

 **EQUIPMENT not suitable for use in the presence of a FLAMMABLE ANAESTHETIC MIXTURE WITH AIR or WITH OXYGEN OR NITROUS OXIDE.**

 **Not designed, intended or authorized for use in systems intended to support or sustain life. For full details of the warranty, including life critical applications, please see ONEAC Warranty, Policy and Procedures (part Number 955-053).**

| MODELS | ON300M601 | ON300M601 | ON600M601 | External Battery Pack* |
|--|---|---|---|--|
| Part number (online operating range - 85-135) (online operating range - 85-135) (online operating range - 185-260) | NA ONM300J-SI ONM300I-SI | ONM300DA-SI ONM300DJ-SI ONM300DI-SI | ONM600XA-SI** ONM600XJ-SI** ONM600XI-SI** | ONMXBC-217 ONMXBC-217 ONMXBC-217 |
| Maximum capacity (volt-amperes, watts) | 300, 200 | 300, 200 | 600, 400 | N/A |
| Batteries | one at 12 V, 7 AH | two at 12 V, 7 AH | two at 12 V, 7 AH | two at 12 V, 17A H |
| Typical runtime by system load: | <i>Due to application specific conditions, your actual run time may be different.</i> | | | |
| @ half load | 16 min. | 39 min. | 27 min. | *** |
| @ full load | 5 min. | 15 min. | 5 min. | |
| Maximum dimensions - H (cm) | 7.4" (18.7) | 7.4" (18.7) | 7.75 (20) | 3.75 (10) |
| Maximum dimensions - W (cm) | 6.0" (15.24) | 6.0" (15.24) | 7.0 (18) | 7.0 (18) |
| Maximum dimensions - D (cm) | 15.5" (39.4) | 15.5" (39.4) | 16 (41) | 17 (43) |
| Net weight - lbs. (kg) | 34 (15) | 43 (20) | 53 (24) | 35 (16) |
| Shipping weight - lbs. (kg) | 37 (17) | 46 (21) | 56 (25) | 38 (17) |
| Input connector | I and J models include IEC 320 M/F detachable cord(s). A models include 6 ft., detachable input cord, 5-15P†. | | | N/A |
| Output receptacles (A models) (I and J models) | NA (4) IEC 320 | (2) 5-15R HG (4) IEC 320 | (4) 5-15R HG (4) IEC 320 | N/A |

* Battery pack for ONM600 models only.

** "X" in model number indicates extended runtime capabilities.

*** Runtimes are based upon fully charged, new batteries. Runtimes are affected by battery age, ambient temperature, site-specific UPS usage patterns, and actual operating

load characteristics. Actual runtimes may vary.

† ONM600 available with 12 foot cord with retaining clamp - part number ONM600XA-SI-4M.

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ONEAC is a UL/BSI registered corporation— Certification No. A2900



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