

Eaton 9E UPS



20-30 kVA 9E



40-60 kVA 9E

Fast Facts

- Up to 98% efficiency
- 17 minutes of runtime without the use of external battery cabinets
- Up to 66% smaller footprint than similar competitive units
- Pre-wired internal batteries make installation simple
- Supported by Eaton's highly rated service network

The Eaton 9E UPS delivers customers value in three significant feature areas: compact footprint, energy efficiency and total cost of ownership. Eaton's unmatched service network combined with the intuitive design of the 9E makes it an easy choice.

Compact Footprint

- The 9E delivers superior protection and up to 17 minutes of runtime in one small footprint
- Up to 66% smaller than similarly specified competitive solutions
- At \$150 per sq ft per year, the 9E can deliver users over \$17,000 in space savings over the life of the UPS
- Easily serviced and maintained without hidden footprint implications

Energy Efficiency

- Delivers up to 98% efficiency while providing complete protection to the load
- Up to 7% more efficient than similar competitive units
- Can save users over \$5,000 per year in utility costs
- Can help users qualify for local utility rebates and incentives

Total Cost of Ownership

- Feature filled unit delivers power protection and batteries in one small cabinet
- Single cabinet solution reduces installation and wiring costs
- Competitive pricing reduces CAPEX costs and provides for a faster return on investment
- Lower OPEX costs with improved energy efficiency and long service life



Powering Business Worldwide

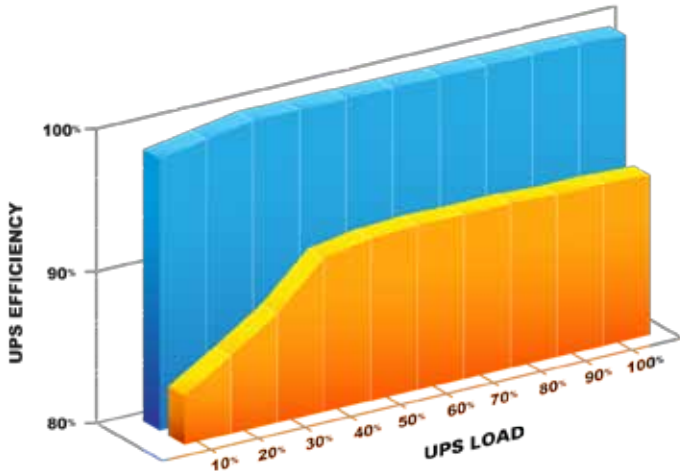
Total Cost of Ownership

The 9E was designed to be the easy choice for customers and locations looking to maximize their total investment and especially those looking to get the best Return on Investment (ROI). The 9E delivers the lowest total cost of operation (TCO) of any UPS in its class by offering a unique blend of savings from several areas; installation, freight, energy efficiency, compact footprint, and CAPEX.

Versus a current competitive offering the 9E can save over \$150,000 in TCO over the 12-year life of the product.

Savings

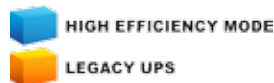
| | |
|---------------------------------------|-------------------|
| Energy | \$125,000 |
| Space | \$35,000 |
| Installation, maintenance and freight | \$2,000 |
| TOTAL | \$150,000+ |



Energy Efficiency

The 9E is the most energy efficient UPS in its class, delivering up to 98% efficiency.

Versus a 60 kVA UPS operating at 91% efficiency, the 9E will save users more than \$55,000 over the life of the product. And, because the 9E doesn't have to work as hard to protect your loads, less heat is given off. Reducing the heat given off by support equipment lowers facility cooling costs. Each unit reduction in kW loss reduces heat output by over 3,000 BTUs.



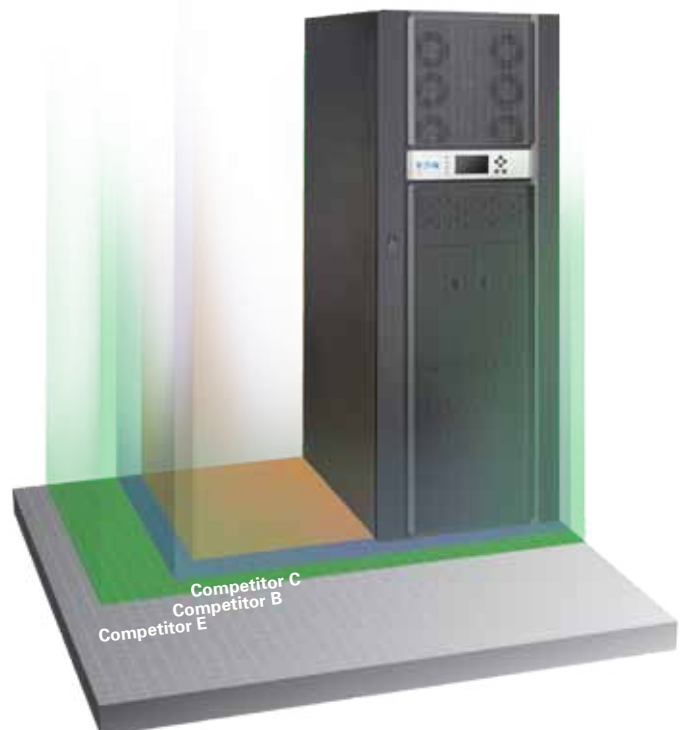
Compact Footprint

The 9E delivers the most efficient and flexible UPS solution on the market. Smaller than any comparable competitor by up to 66% the 9E allows facilities to use floor space for revenue producing equipment and not power /support equipment.

Space also costs money, to build, to maintain and to condition. Most office and datacenter space costs \$150 per year per square ft to maintain. That means in addition to competitive products stealing space from your revenue producing equipment, they are also taking money out of your pocket due to their space. Up to \$17,000 over the life of the competitor's UPSs are wasted simply by being excessively large.

See for yourself

| 60kVA | Width (in) | Depth (in) | Height (in) | Footprint (sq/ft) |
|-----------------|------------|------------|-------------|-------------------|
| Eaton 9E | 23.6 | 31.5 | 73.6 | 5.2 |
| A | 45.3 | 30.0 | 72.0 | 9.4 |
| B | 56.8 | 38.0 | 78.5 | 15.0 |
| C | 48.0 | 35.5 | 81.5 | 11.8 |
| D | 59.8 | 69.5 | 72.0 | 28.9 |
| E | 69.3 | 29.5 | 70.9 | 14.2 |



Serviceability

The 9E was designed to be easily and quickly serviced to give customers and locations the highest availability on the market.

- Mean Time to Repair (MTTR) < 30 minutes
- Captive hardware
- Optional on-board Maintenance Bypass rotary switch allows replacement of power modules, control board and display

Installation

The 9E engineers also spent time ensuring that this UPS would be one of the easiest units to install on the market. Reduced installation costs mean the 9E can be up and supporting your loads faster, and reducing installation and wiring costs only further improves the 9E's TCO.

- Pre-wired internal batteries, only facility connections are needed
- Integrated "ship flat" wiring conduit plate and doghouse
- Optimized angled connections reduce bending radius of input and output wiring
- Clean clear wiring terminal block access for easy connections
- Integrated wheels facilitate easy movement to final location

9E Accessories



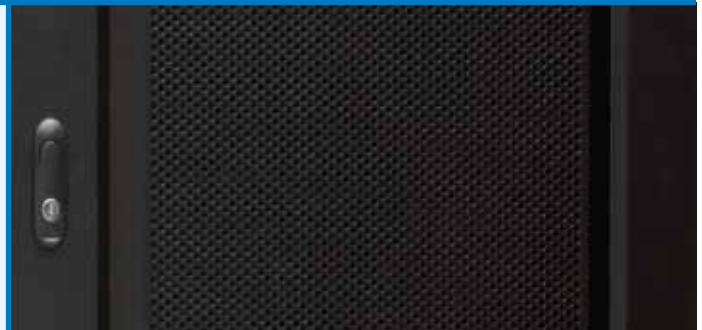
Extended Battery Cabinet (EBC)

EBCs give the 9E flexible runtime options to meet the needs of any requirement. Seamless matching cabinets can be easily paried with the 9E.

Integrated Accessory Cabinet (IAC)

Several configurations of the IAC are available

- Parallel Tie and Maintenance Bypass
- Maintenance Bypass
- Distribution with one 42-pole panelboard



Integrated Transformer Cabinet (ITC)

Houses transformer configurations to adjust output or input/output voltages to meet location requirements

- 480:208
- 480:480

Wall-Mount Bypass

Save even more floorspace with an Eaton Wall-mount bypass panel, available in two configurations

- Bypass
- Bypass and 36-pole distribution



TECHNICAL SPECIFICATIONS¹

POWER

| | |
|--------------------------|---|
| Ratings (kVA/kW) | 20 kVA/16 kW, 30 kVA/24 kW, 40 kVA/32 kW and 60 kVA/48 kW |
| Topology | Double-conversion online UPS |
| Electrical Input | 208/120 V, 4 wire or 220/127V, 4 wire |
| Input Voltage Range | -15%, +20% from nominal (208V) at 100% load without depleting battery |
| Operating Frequency | 50/60 Hz (40 to 72 Hz) |
| Input Power Factor | P.F >0.99 typical |
| Input Current Distortion | 5% THD |

ELECTRICAL OUTPUT

| | |
|---------------------------|---|
| Nominal Output Voltage | 208/220, 3/4 wire |
| Output Voltage Regulation | ±1% Static; ±5% dynamic at 100% resistive load change, <20 ms response time |
| Efficiency | Up to 92% standard mode, up to 98% in High-efficiency mode |

BATTERY

| | |
|---------------------|---|
| Battery Type | 9Ah, sealed, lead-acid, maintenance-free |
| Battery Runtime | 20 kVA - 17 minutes, 30 kVA - 12 minutes, 40 kVA - 10 minutes, 60 kVA - 5 minutes |
| Battery Replacement | Field-replaceable |

GENERAL

| | |
|------------------------|--|
| Efficiency | up to 98% High-efficiency mode up to 92% Double-conversion |
| UPS Bypass | Automatic on overload or UPS failure |
| Dimensions and Weights | 20-30 kVA - 20.9 x 31.5 x 52; 1049.4 lbs 40-60 kVA - 23.6 x 31.5 x 73.6; 1499.1 lbs |
| Overload | 150% for 40 ms / 125% for 30 seconds 110% for 10 min |

COMMUNICATIONS

| | |
|---------------------|-----------------------------------|
| LCD Display | Graphical LCD with blue backlight |
| LEDs | (4) LEDs for notice and alarm |
| Audible Alarms | Yes |
| Communication Ports | (1) RS-232, (1) REPO |
| Communication Slot | (2) Mini-slot communication bays |
| Power Management | Bundled Software Suite CD |

ENVIRONMENTAL

| | |
|-----------------------|---|
| Operating Temperature | 0°C to +30°C; Batteries recommended max. +25°C |
| Storage Temperature | -25°C to +55°C without batteries +15°C to +25°C with batteries |
| Relative Humidity | 5 –95%, non-condensing |
| Audible Noise | < 60 dBA at 1 meter (noise less room) typical |
| Altitude | < 1000m at +30°C |

CERTIFICATIONS

| | |
|-----------------------|--|
| Safety Certifications | UL60950 , EN55022/EN55024 |
| EMC Compliance | IEC 62040-2, FCC Part 15, ICES-003, VCCI, CISPR 22 |
| Quality | ISO 9001: 2000 and ISO 14001:1996 |
| Markings | UL, cUL |

1. Due to continuous product improvements, program specifications are subject to change without notice.

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