

Facility Planning Data Sheet

MGE EPS 7000 UPS 300 / 400 / 500 kVA (480V-480V / 600V-600V)



UPS Rating		UPS AC Input				Battery System				AC Output		Mechanical Data				
		Voltage		Current		Rec. OCPD	Nominal VDC	Battery kW	Max. Current @ Nom. V	Current @ Full Load		Typical Dimensions WxHxD	Average Weight Lbs	Floor Loading Lbs/Ft ²	Heat Rejection BTU/Hr	Cooling Air CFM (m3/h)
		Input	Output	Full Load	Max.					Max.	OCPD					
300	270	480	480	371	543	700	480	270	721	361	500	69x82x39	6,900	313	59,400	4,070
300	270	600	600	322	466	600	480	270	721	289	400	114x82x39	10,500	288	65,000	4,070
400	360	480	480	508	688	900	480	360	962	481	600	69x82x39	6,900	313	78,100	4,070
400	360	600	600	441	586	800	480	360	962	385	500	114x82x39	10,500	288	86,000	4,070
500	450	480	480	656	840	1,100	480	450	1,195	601	800	69x82x39	6,900	313	110,750	4,070
500	450	600	600	569	711	1,000	480	450	1,195	481	700	114x82x39	10,500	288	112,000	4,070

- Input current based on full rated output load.
- Maximum (Max.) current is for duration of battery recharge.
- Input and bypass cables must be run in separate conduits from output cables. Not more than three conductors in raceway assumed; ambient temperature of 86°F assumed.
- If initial load is less than UPS' rated output, it is recommended that AC input, battery, and AC output wiring and overcurrent protection be sized to UPS' full load rating to accommodate possible future expansion.
- Nominal battery voltage is shown at 2.0 volts/cell per NEC 480-2.
- DC cables should be sized for a total maximum of less than 1% of CB rating.
- OCPD = Overcurrent Protection Device. Recommended represents 125% of nominal full load current (continuous) per NEC 215.
- Minimum-sized grounding conductors to be per NEC 250-122. Parity-sized ground conductors are recommended. Neutral conductors to be sized for full capacity per NEC 310-15(b)(4).
- Wiring requirements:
 - AC Input/Output: 3Ø, 3 or 4 wire + ground, depending on UPS configuration.
See Installation Manual and submittal drawings for specific instructions.
 - DC Input: 2 wire (positive and negative) + ground
- All wiring to be in accordance with all applicable national and/or local electrical codes.
- Minimum access clearance per UPS drawings.
- Top or bottom cable entry through removable access plates. Punch plates to suit conduit size, then replace.
- Control wiring and power wiring must be run in separate conduit.
- Weights and dimensions shown do not include battery cabinet(s), distribution cabinet(s), or other options.
- Backup emergency generator must be properly sized for UPS application and equipped with an isochronous governor for frequency regulation, and a UPS-compatible voltage regulator for voltage stability.
- If site configuration requires an external maintenance bypass, phase parity between UPS input and UPS bypass must be ensured. Consult MGE applications engineer.
- References are per NEC 1999. Consult local codes for possible variations.

Additional Notes:

A. Temperature rating of conductors: 90°C (194°F). Reference NEC Table 310-16, 75°C column, using copper conductors. 75°C (167°F) cable terminal conductors assumed.

RATINGS OF CABLES AND OVERCURRENT DEVICES SUPPLIED FOR INFORMATION ONLY. USER TO CONSULT WITH THEIR ENGINEERING SERVICES BEFORE ADOPTING.