

Facility Planning Data Sheet

MGE Comet UPS 40 - 150 kVA (208V-208V / 480V-208V / 480V-480V)



UPS Rating		UPS AC Input						Battery System			AC Output		Mechanical Data				
		Voltage		Current		Recommended Input AWG	Rec. OCPD	Nominal VDC	Battery kW	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)
kVA	kW	Input	Output	Full Load	Max.						Max.	OCPD					
40	32	208	208	111	131	2/0 AWG	200	432	36	82	111	150	33x64x34	1,760	245	13,500	720
40	32	480	208	48	57	4 AWG	75	432	36	82	111	150	33x64x34	1,360	189	12,135	720
40	32	480	480	48	57	4 AWG	75	432	35	82	48	60	33x64x34	880	123	8,220	720
50	40	208	208	139	164	3/0 AWG	225	432	45	103	139	200	33x64x34	1,760	245	16,873	960
50	40	480	208	60	71	4 AWG	100	432	45	103	139	200	33x64x34	1,360	189	15,169	960
50	40	480	480	60	71	4 AWG	100	432	43	103	60	80	33x64x34	880	123	10,276	960
65	52	208	208	180	212	2X 1/0 AWG	300	432	58	134	180	225	33x64x34	2,115	295	17,552	960
65	52	480	208	78	92	2 AWG	125	432	58	134	180	225	33x64x34	1,590	221	15,433	960
65	52	480	480	78	92	2 AWG	125	432	56	134	78	100	33x64x34	970	135	11,328	720
80	64	208	208	222	261	350 MCM	300	432	71	165	222	300	33x64x34	2,115	295	21,603	1,440
80	64	480	208	96	113	1/0 AWG	150	432	71	165	222	300	33x64x34	1,590	221	21,603	1,440
80	64	480	480	96	113	1/0 AWG	150	432	69	165	96	125	33x64x34	970	135	13,942	1,440
100	80	208	208	278	327	2X 4/0 AW	400	432	88	197	278	350	69x67x34	3,400	216	28,300	1,440
100	80	480	208	120	141	2/0 AWG	175	432	88	197	278	350	43x67x34	2,450	250	22,278	1,440
100	80	480	480	120	141	2/0 AWG	175	432	86	197	120	150	43x67x34	1,460	149	15,420	960
125	100	208	208	347	407	2X 250 MCM	500	432	110	246	347	450	69x67x34	3,400	216	38,247	2,160
125	100	480	208	150	177	4/0 AWG	200	432	110	246	347	450	43x67x34	2,450	250	30,662	1,440
125	100	480	480	150	177	4/0 AWG	200	432	108	246	150	200	43x67x34	1,460	149	20,804	1,440
150	120	208	208	417	490	2X 350 MCM	600	432	132	295	417	600	69x67x34	3,400	216	50,759	2,640
150	120	480	208	180	213	2X 1/0 AWG	250	432	132	295	417	600	43x67x34	2,450	250	41,560	2,160
150	120	480	480	180	213	2X 1/0 AWG	250	432	129	295	180	225	43x67x34	1,460	149	26,351	1,440

- 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 fullload 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.