

Durathon DC System Technical Specifications – MWh Series

The Durathon DC System MWh Series is based on one or more 1 MWh Durathon Battery Enclosures paired with a Durathon Interface Enclosure, which acts as the hub for all system power and communications connections. To increase duration or energy capacity, the number of 1 MWh enclosures connected in parallel can be increased as needed. All specifications outlined below reflect the total requirements of both the 1 MWh Durathon Battery Enclosures and the accompanying Durathon Interface Enclosure.

Technical Data	DC1 MWh	DC2 MWh	DC3 MWh	DC4 MWh	DC5 MWh	DC6 MWh	units
Maximum Power	500	1,000	1,000	1,000	1,000	1,000	kW
Maximum Current	1,150	2,300	2,300	2,300	2,300	2,300	A
Operating Voltages:							
Maximum Recharge	577						V
Open Circuit	557						V
Discharge Termination	432						V
Power Delivery Capacity¹:							
2 hours	500	1,000	1,000	1,000	1,000	1,000	kW
3 hours	333	667	1,000	1,000	1,000	1,000	kW
4 hours	250	500	750	1,000	1,000	1,000	kW
5 hours	200	400	600	800	1,000	1,000	kW
6 hours	167	333	500	667	833	1,000	kW
Maximum Long Term¹ Recharge Power Acceptance¹:							
20% DOD	100	200	300	400	500	600	kW
50% DOD	325	650	975	1,000	1,000	1,000	kW
90% DOD	500	1,000	1,000	1,000	1,000	1,000	kW
Recharge Times (from full DOD)¹:							
100% Maximum Power	8.4	8.4	8.4	8.8	9.3	10.0	h
Round Trip AC Efficiency^{2†}	85						%
General Data	DC1 MWh	DC2 MWh	DC3 MWh	DC4 MWh	DC5 MWh	DC6 MWh	units
Operating Ambient Temperature	-40 to 50						°C
	-40 to 122						°F
Altitude³	1,000						m
Site Restrictions	Designed for indoor/outdoor installation						

¹ Values based on beginning of life performance.

¹ Long Term is defined as greater than previous discharge.

² DC solutions only. AC roundtrip efficiency estimated; assumes typical peak shave application.

³ Without derating. Additional operating range is possible.



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Specifications subject to change without notice. Please consult GE Energy Storage for the latest specifications for your application. Please refer to the Durathon Safety Brief for additional information.

General Data	DC1 MWh	DC2 MWh	DC3 MWh	DC4 MWh	DC5 MWh	DC6 MWh	units
Life:							
Cycle Life	4,500						cycles
Float Life	15						years
Dimensions⁴:							
Overall Height	2,355 93						mm in
Overall Depth	2,161 85						mm in
Overall Width	4,563 180	8,351 329	12,140 478	15,927 627	19,716 776	23,504 925	mm in
Weight	19,170 42,263	37,070 81,725	52,970 121,188	72,870 160,651	90,770 200,114	108,670 239,576	kg lb
Interconnect:							
Battery Terminals	Bus Bar						
Communication	Modbus TCP/IP, EGD						
Warm-up Power Requirements ⁵	75	150	225	300	375	450	kW
Auxiliary Power Requirements ⁶	10	10	10	15	15	20	kVA
Electrical Requirements	Grounded negative DC bus, Voltage ripple < 4 Vrms, External AC and DC overcurrent protection and disconnect (customer provided)						
Certification: Complete (as appropriate per model)	CE Marking, EMC/FCC/CISPR 22 Class A UL 1973 Seismic Zone 4 Outdoor enclosure rating to NEMA 3R						

⁴ Dimensions are nominal.

⁵ Power from DC bus required. Warm-up period approximately 10-12 hours.

⁶ System auxiliary connection 480 VAC single phase. Circuit size = 10 amp.

Technical Drawings

From module to rack to system, the Durathon E620 Battery and DC System Series are designed for flexibility and expansion.



Figure 1. Durathon E620 Battery



Figure 2. Durathon DC100kWh System



Figure 3. Durathon DC1MWh System