

# MEGATOWER RANGE

## Range Overview Specification Sheet

### megaTower Plus

### megaTower Extra



6MIT Battery Modules



6M2T Battery Modules



6M3T Battery Modules



6M4T Battery Modules



10M3T Battery Modules



10M4T Battery Modules

#### Battery Specifications

Model	1 x FWMT-0217-HVPA-07670648-BM	2 x FWMT-0217-HVPA-07670648-BM	3 x FWMT-0217-HVPA-07670648-BM	4 x FWMT-0217-HVPA-07670648-BM	3 x FWMT-0361-HVXA-12781080-BM	4 x FWMT-0361-HVXA-12781080-BM
Total Energy Capacity [kWh]	217	434	651	868	1085	1447
Usable Energy, 90% DoD [kWh]	195	391	586	781	977	1302
Recommended Energy per Cycle, 80% DoD [kWh]	174	347	521	695	868	1158
Battery Current Capacity [Ah]	314x1	314x2	314x3	314x4	314x3	314x4
Nominal Voltage [V] <sup>1</sup>	691				1152	
Max/Min. Operating Voltage [V]	767/648				1278/1080	
Max/Cont. Discharge Current [A] <sup>2</sup>	220/200	440/400	660/600	880/800	660/600	880/800
Max/Cont. Discharge Power [kW]	152/138	304/276	456/414	608/553	760/691	1014/922
Max/Cont. Charge Current [A] <sup>2</sup>	160/96	320/192	480/288	640/384	480/288	640/384
Max/Cont. Charge Power [kW]	110/66	221/132	331/199	442/265	552/331	737/442
Short Circuit Current [kA]	5	10	15	20	15	20
Total Number of Modules	6	12	18	24	30	40
Module Weight [kg]	234					
Total Module Weight per Tower [kg]	6 x 234 (1404)	12 x 234 (2808)	18 x 234 (4212)	24 x 234 (5616)	30 x 234 (7020)	40 x 234 (9360)
Crated Module Weight [kg]	284					
Total Crated Module Weight [kg]	6 x 284 (1707)	12 x 284 (3408)	18 x 284 (5112)	24 x 284 (6816)	30 x 284 (8520)	40 x 284 (11360)
Module Dimensions - H x W x D [mm]	230x1225x682					
Crated Dimensions per Module - H x W x D [mm]	6 x 422x1320x772	12 x 422x1320x772	18 x 422x1320x772	24 x 422x1320x772	30 x 422x1320x772	40 x 422x1320x772
Module and Cell Configuration	36 cells per module in series, 6 modules in series per tower. 1 tower per battery	36 cells per module in series, 6 modules in series per tower. 2 parallel towers per battery	36 cells per module in series, 6 modules in series per tower. 3 parallel towers per battery	36 cells per module in series, 6 modules in series per tower. 4 parallel towers per battery	36 cells per module in series, 10 modules in series per tower. 3 parallel towers per battery	36 cells per module in series, 10 modules in series per tower. 4 parallel towers per battery

#### Notes to Specification Sheet

1. Voltage suitable for various high DC voltage inverters. Please enquire with Freedom Won for pairing support.
2. Max current duration 10s every 8min. Derating will apply outside the 5°C to 50°C range. Refer to warranty document for thermal guidelines.
3. These dimensions include the isolation cabinet on the side. Power supply and isolation cabinet dimensions H x W x D [mm] 930x440x370mm. Isolation cabinet door opens towards the front face of the megaTower. Isolation cabinet can be mounted either side of the megaTower.
4. Refer to warranty document for further details.

#### DISTRIBUTORS AND RESELLERS

Contact your nearest Accredited Freedom Won Distributor or Reseller Installer for further sales and technical support.

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# MEGATOWER RANGE

## Range Overview Specification Sheet

### megaTower Plus

### megaTower Extra



6M1T Frame



6M2T Frame



6M4T Frame



10M4T Frame

#### Frame Specifications

Model (Incl. Isolation Cabinet)	FWMT-6M1T-HVPA-FRAME	FWMT-6M2T-HVPA-FRAME	FWMT-6M4T-HVPA-FRAME	FWMT-10M4T-HVXA-FRAME
Total Weight - Frame [kg]	92	184	368	580
Crated Weight - Frame [kg]	Frame: 132   Isolation Cabinet: 98   Busbars: 58	Frame: 265   Isolation Cabinet: 98   Busbars: 58	Frame: 530   Isolation Cabinet: 98   Busbars: 58	Frame: 788   Isolation Cabinet: 98   Busbars: 58
Overall Frame Dimensions (Incl. Isolation Cabinet) [mm] <sup>3</sup>	1596x(1264+440)x700	1596x(2520+440)x700	1596x(5032+440)x700	2568x(5032+440)x700
Crated Frame Dimensions (Incl. Isolation Cabinet) [mm]	Frame: 600x850x1740   Isolation Cabinet: 1046x596x486   Busbars: 120x140x550	Frame: 600x850x1740   Isolation Cabinet: 1046x596x486   Busbars: 120x140x1675	Frame: 780x1700x1740   Isolation Cabinet: 1046x596x486   Busbars: 120x140x4060	Frame: 900x1600x2650   Isolation Cabinet: 1046x596x486   Busbars: 140x140x4100
Frame Configuration	1 Tower to house up to 6 modules (6 Modules per tower)	2 Towers to house up to 12 modules (6 Modules per tower)	4 Towers to house up to 24 modules (6 Modules per tower)	4 Towers to house up to 40 modules (10 Modules per tower)

#### Additional Information

DC Connection	Busbar in isolator cabinet - installer to connect appropriate cables			
DC Connection - Fly Leads (no. per electrode) [mm <sup>2</sup> ]	1x120mm <sup>2</sup> Polybraid Cable		2 x 95mm <sup>2</sup> Polybraid Cable	
Module Enclosure	Aluminium and Mild Steel - Powder coated white, rack mounted. Option of installing isolation cabinet on either side of rack.			
Protection	Main bank fuses (600A), fuses in each module (300A), contactors in each master module. Protection against short circuits, overcurrent, cell under and over voltage and temperature, weak cell detection		Main bank fuses (1000A), fuses in each module (300A), contactors in each master module. Protection against short circuits, overcurrent, cell under and over voltage and temperature, weak cell detection	
Control Interface	CAN Bus, Ethernet/Gateway, optional Fiber connection			
Human Interface	RJ45 Plug for Programming or PC access via ethernet, 8-pin Deutsch connector for access via CAN. On/Off button with indicator light. EMS optional			
Remote Monitoring	Real time data logging and remote monitoring over Ethernet. Internet connection required			
Service Life <sup>4</sup>	Standard Warranty: 10 year (or 8000 cycles) 80% DoD, 0.5C Max Discharge, 0.3C Max Charge, Max 25deg. Expected life: >15 yrs (>8 000 cycles) at 80% DoD			
Battery Standards	Battery Specification: Designed and built according to IEC62619, IEC61000, UN38.3			

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With a new and improved design, Freedom Won empowers you to build your own megaTower configuration - You'll select:

### Number of Modules per Stack



### Number of Towers



### Appropriate Frame

#### megaTower Plus



#### megaTower Extra



### Empty Tower Covers (if applicable)



(Including empty tower cover)



Note: Empty tower covers sold separately