

# Battery Module

TEM-38-150-A/225-A/300-A



TEM-38-150-A



TEM-38-225-A



TEM-38-300-A



TEM-51.2-280-F1



TEM-76.8-150-F1



TEM-166.4-280-Y



## Product Overview

These products belong to the battery module series developed by chengdu tecloman.our bess product is designed with flexibility, light weight, simple maintenance, and wide application scenarios in mind. It boasts high energy density, long service life, and safety reliability. Moreover, its capacity and voltage can be customized according to customer needs and application scenarios.



High safety performance,  
green environmental protection



Reliable electrical design,  
high safety protection grade



easy installation,  
flexible expansion



Laser welding process,high reliability  
and safe connection



Independent air duct design is convenient  
for system heat dissipation



Reliable insulation grade design



Model	TEM-38-150-A	TEM-38-225-A	TEM-38-300-A
Cathode material	Lithium iron phosphate		
Cell capacity	75Ah	75Ah	150Ah
Group mode	2P12S	3P12S	2P12S
Rated Voltage	38.4V	38.4V	38.4V
Rated capacity	150Ah	225Ah	300Ah
Rated power	5.76kWh	8.64kWh	11.52kWh
Voltage range	34.8-42 V (2.9-3.5 V)	34.8-42 V (2.9-3.5 V)	34.8-42 V (2.9-3.5 V)
Rated charge and discharge power	5.76kW	4.32kW	5.76kW
Rated charge and discharge current	150A	112.5A	150A
Maximum charging and discharging current	180A	165A	165A
Charge and discharge efficiency <sup>2</sup>	≥95%		
Operating Temperature	Charge: 0°C ~ 55°C; discharge: -20°C ~ 55°C		
Optimal storage temperature <sup>2</sup>	15°C~35°C		
Relative humidity	0~85%RH, non-condensing	0~90%RH, non-condensing	0~90%RH, non-condensing
Maximum allowable altitude	≤4000m		
Cycle life	≥6000 cycles (0.5C, 25°C, 90%DOD g 80%EOL)		
Self power consumption/month	≤3%		
Cooling method	Air cooling		
(BMS+FAN) Power Consumption (BMS + FAN)	≈12W		
Communication mode	CAN2.0		
IP Class	IP20		
Overall dimensions (without lugs)	360mm×573mm×242mm	478mm×573mm×242mm	420mm×670mm×242mm
Weight	66±1kg	87±1kg	93±0.5kg

Test environment: ambient temperature 25 ± 5 °C, relative humidity 60 ± 25% RH, atmospheric pressure 86 - 106 kPa.

All the test data are obtained under the condition of DC charge and discharge (0.5CCC-CV/0.5CCC).

Model	TEM-51.2-280-F1	TEM-76.8-150-F1	TEM-166.4-280-Y
Cathode material	Lithium iron phosphate		
Cell capacity	280Ah	150Ah	280Ah
Group mode	1P16S	1P24S	1P52S
Rated Voltage	51.2V	76.8V	166.4V
Rated capacity	280Ah	150Ah	280Ah
Rated power1	14.336kWh	11.52kWh	46.59kWh
Voltage range	46.4-56V(2.9-3.5V)	69.6-84V (2.9-3.5V)	145.6-189.8V (2.8-3.65V)
Rated charge and discharge power	7.168kW	11.52kW	23.296kW
Rated charge and discharge current	140A	150A	140A
Maximum charging and discharging current	165A	150A	280A
Charge and discharge efficiency2	≥95%		
Operating Temperature	Charge: 0°C ~ 55°C; discharge: -20°C ~ 55°C		
Optimal storage temperature2	15°C~35°C		
Relative humidity	0~90%RH, non-condensing		
Maximum allowable altitude	≤4000m		
Cycle life	≥6000 cycles (0.5C, 25°C, 90%DOD ( cycles) 80%EOL)		
Self power consumption/month	≤3%		
Cooling method	Air cooling		Liquid cooling
(BMS+FAN) Power Consumption (BMS + FAN)	≈12W		≈3W
Communication mode	CAN2.0		
IP Class	IP20		IP67
Overall dimensions (without lugs)	420mm×790mm×242mm	478mm×749mm×242mm	810mm×1200mm×240mm
Weight	115±1kg	98±0.5kg	≈350kg

Test environment: ambient temperature 25 ± 5 °C, relative humidity 60 ± 25% RH, atmospheric pressure 86 - 106 kPa.

All the test data are obtained under the condition of DC charge and discharge (0.5CCC-CV/0.5CCC).

