



Duramax

Heavy-Duty Power



Duramax DM-120- 12.8VDC Lithium Battery

Item	Specification
Cell Type	Prismatic A-Grade LFP48173170 3.2V 120AH
Normal Capacity	120Ah
Normal Voltage	12.8V
Charge Cut-off Voltage	14.6V±0.4V
Low Voltage Cut-off	10.0V±0.4V
Max Charge Current	60A
Continuous Discharge Current	120A
Peak Discharge Current	200A (5sec)
Battery Housing	ABS
Can connect in Series	Up to 4 = 48V
Can Connect in Parallel	Up to 4 = 480A
Operating temperature	Charging: 0°C~45°C Discharging: -10°C~60°C
Storage temperature	-5°C~35°C
Storage Humidity	≤75% RH
Environmental condition	Temperature: 25±2c Humidity: 45-75%RH Atmospheric Pressure: 86-106 KPA
Terminals	T8
Dimensions	345mm(L)*245mm(H)*190mm(W)
Weight	15Kg±1KG



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Test Methods and results/ General Information

Test	Method & Result
0.2C Capacity Test Result = $\geq 120\text{Ah}$	After standard charging, held battery for 10mins, then discharge at 0.2C to voltage 10.0V, recording the discharging time. Result = $\geq 120\text{Ah}$
Cycle Life Result = ≥ 5000	-Provide constant current 0.2C charge to 14.6V, then constant voltage charge until the current declines to 0.01C. Rested 10mins then provided constant current of 1C discharge to 10.0V . Rested another 10mins. Repeat above steps till continuous discharging capacity Higher than 70% of the Initial Capacities of the Cells Result = ≥ 5000
Capability of keeping Current Result= $\geq 200\text{min}$	20+/-5C, After standard charging, held the battery for 28days, then discharge at 0.2C rate to voltage 10.0V, recording the discharging time. Result= $\geq 200\text{min}$
Battery appearance visual check: Carefully open the protective carton once you revive your battery. Pls do check if the batteries have been impacted. If everything goes well, pls go on. If you see any problems ,pls contact us at the very first time without any delay.	Do correctly connect the battery with Positive Pole and Negative Pole (usually Red + Black -). Please NOTE: Short circuit would possibly happen due to wrong connection on +/- terminal.



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Connection - Notice for Series or Parallel

Do keep the battery packs within 1.0VDC voltage difference if you are going to connect them in series or parallel. The smaller voltage difference (0.1V-1.0V) of the battery the better for batteries connection.

DO NOT discharge the battery pack to 0% Power. Which we DON'T recommend. We recommend 50% depth of charge, which will maintain a good cycle of life.

Please charge the battery to 80% (100% would also be fine) and DO Recharge the Battery while they are discharged/used down to 20% Power.

DO Recharge the Battery Packs every 3 months if they are shelved/not used for long time.

Battery operation instruction

Charging current Cannot surpass the biggest charging current which in this specification book stipulated.

Charging voltage Does not have to surpass the highest voltage range which in this specification book stipulated.

Charge temperature The battery must carry on the charge in the ambient temperature scope which this specification book stipulated.

Uses the constant electric current, and the constant voltage way charge, the prohibition reverse charges. Incorrect connection of the battery positive electrode and the negative terminal can damage the battery.

Discharging current

The discharging current does not have to surpass this specification book stipulation the biggest discharging current, the oversized electric current electric discharge can cause the battery capacity reduction and to cause the battery overheat.

Discharge temperature

The battery discharge must carry on in the ambient temperature scope which this specification book stipulated.

Charge and Discharge:

- Battery must be charged in appropriate charger only.
- ▪ Never use a modified or damaged charger.
- ▪ Do not leave battery in charger over 24 hours.
- Storage : Store the battery in a cool, dry and well-ventilated area.

Warranty is 5 years from the date of purchase from Duramax Pty Ltd.

Please keep Proof of Purchase. Warranty is acted upon In case of cells are defected due to manufacturing process instead of customers abuse or misuse.