



PRODUCT SPECIFICATION SUMMARY

8S 40000mAh Solid State UAV Battery

For an 8S 40Ah UAV battery quote, New Journey offers a build using 9987191-40000mAh cells. Their stated energy density is 400Wh/kg; the complete 29.6V pack provides 1184Wh at about 3.2kg. Its 80A continuous rating distinguishes this option from the separate 120A configuration.

Compiled from the product page for initial selection. This is not a signed factory specification or a test report. Reference configurations are for selection; final supply follows the approved order configuration.

Technical Specifications

Parameter	Specified value
Product type	8S solid state UAV battery pack
Cell designation	9987191-40000mAh (solid state)
Series configuration	8S
Nominal capacity	40000mAh / 40Ah
Nominal voltage	29.6V
Nominal energy	1184Wh, calculated from 29.6V x 40Ah
Individual cell energy density	400Wh/kg
Maximum charge current	20.0A (0.5C)
Charge cut-off voltage	34.0V
Discharge cut-off voltage	20.0V
Continuous discharge current	80.0A (2C)
Maximum discharge current	280A (7C)
Cycle-life reference	500 cycles
Storage temperature	-20 to 40°C
Working temperature	-20 to 55°C
Storage humidity	Below 85% RH
Finished pack dimensions	93 x 90 x 205mm, each dimension +/-5mm
Approximate finished pack weight	3200g



Connection options

Interface	Optional reference configuration
Finished pack envelope	W 93 +/-5mm x T 90 +/-5mm x H 205 +/-5mm
Power lead	8AWG, 150mm
Power plug	XT90
Balance harness	22AWG, 150mm
Balance plug	XH-9P (B0-B8)

Configuration and rating notes

The stated 400Wh/kg rating applies to the individual 9987191-40000mAh cell reference. Use the corresponding cell specification or test record to confirm its measurement conditions. Pack leads, insulation and wrapping belong to the assembly design; their mass or external outline must not be used to reverse-calculate or question the cell rating. For aircraft integration, review pack weight, dimensions and discharge limits separately.

Operating-temperature limits do not by themselves define permitted charging temperatures. Apply the approved charging profile, load conditions and finished-harness limits for the ordered configuration.

For this 8S 40000mAh drone battery, 1184Wh is nominal stored energy, not a flight-time result. The approximately 3.2kg mass must be included in the aircraft energy budget. Hover or cruise power, payload and landing reserve determine how much of that energy is useful on a particular mission.

A procurement review should keep the cell identification, complete-pack mass and finished dimensions in separate fields. Capacity and voltage results should state the actual test conditions. This prevents a cell-level figure from being copied onto a finished-pack acceptance record without its basis.