

Karaa Battery

A removable 36 V 522 Wh lithium-ion pack with its own battery management system, lockable to the bicycle and charged from any wall socket.

36
V

nominal voltage

14.5
AH

capacity

522
WH

energy

6-7
H

full charge



The pack: 10S5P lithium-ion NMC, lockable on a Karaa mount, IP54.

The pack

Nominal voltage	36 V
Capacity	14.5 Ah, 522 Wh
Cells	Lithium-ion NMC, 10S5P, fifty cells of 2,900 mAh
Discharge	20 A continuous, 720 W at 36 V. 40 A over-current cut-off.
Mount	Karaa mount, lockable. Removable for charging indoors.
Connector	Waterproof 9-pin, battery to motor
Ingress protection	IP54, dust-protected and splash-resistant
Operating temperature	Charge 0 to 45°C. Discharge -10 to 50°C.
Warranty	500 charge cycles or one year, whichever comes first. Failure means capacity below 80 per cent of rated, or a functional defect.

The charger

The charger ships with the battery. It is not a separately warranted item: it is replaced only if a fault is reported within seven days of delivery.

Output	42 V DC, 2 A, with smart cut-off
Input	110-240 V AC, 50/60 Hz. Any dry, well-ventilated socket.
Charging time	About six to seven hours from empty
DC connector	2.5 mm DC barrel
Note	Use of a non-approved charger voids the battery warranty.

Protection and monitoring

A battery management system sits inside the pack and governs every cell.

Protections	Over-voltage, under-voltage, over-current, short-circuit and over-temperature
Balancing	Cells matched at assembly. No active balancing.
State of charge	Reported to the handlebar display and to the Karaa app over Bluetooth
Fault reporting	Faults surface on the display and in the app

Transport and handling

Classification	Lithium-ion battery, UN3480 or UN3481 depending on packing
Storage	Cool and dry, partially charged. Up to one year at -20 to 25°C and 70 per cent relative humidity or below.

Specification source: Karaa battery technical specification, with the Karaa canonical product specification and warranty policy of July 2026. Cell count, cell capacity and storage from the cell manufacturer's product specification for the 18650 NMC cell used in this pack, document revision A/0.

Specifications may be updated in future revisions. Project-specific deviations are recorded in the signed quotation. Pricing on request.