

NIM 02 Folding E-Bike

Product Specification

velofoldgroup | Version V1.0 | 7 October 2026



Mid-drive motor

SC31 (in-house)

Rated / peak power

250 W / 460 W

Peak torque

95 N • m

Net weight

16.9 – 17.6 kg

Range (7Ah / 10Ah)

70 km / 110 km

Max assist ratio

350%

NIM 01 / NIM 02 full carbon folding frame | 20 × 2.125 tyres | front & rear disc brakes

- In-house SC31 mid-drive motor: 95 N • m peak torque, 350% assist ratio
- Full carbon folding frame, 16.9 – 17.6 kg net weight
- Silent belt drive + automatic shifting, 25 km/h max design speed
- NFC authenticity verification (HunterTag) — no app needed, verified in seconds

1. Product Overview

Product name	NIM series folding e-bike
Models	NIM 01 / NIM 02
Product type	Electric power-assisted bicycle (E-Bike)
Drive system	SC31 mid-drive motor (in-house)
Intended use	Urban commuting, leisure riding, light touring
Compliance	EN15194 (EU) / GB17761 (CN)

2. Model Comparison

Item	NIM 01	NIM 02
Battery capacity	36V 7Ah	36V 10Ah
Range (road test)	70 km	110 km
Net weight	16.9 – 17.6 kg	16.9 – 17.6 kg
Frame	Full carbon folding frame	Full carbon folding frame
Motor	SC31 mid-drive motor	SC31 mid-drive motor
Drivetrain	Belt drive + automatic shifting	Belt drive + automatic shifting

Apart from battery capacity and range, NIM 01 and NIM 02 share the same frame, motor, drivetrain, braking and smart features.



Vehicle, unfolded | product photo



Vehicle, folded | product photo

3. Vehicle Specifications

Net weight	kg	16.9 – 17.6
Max load capacity	kg	120
Frame material		Full carbon fibre
Frame structure		Folding
Overall dimensions (L × W × H)	mm	1490 × 600 × 1020
Tyres		20 × 2.125
Braking system		Front & rear disc brakes
Drive type		Silent belt drive (replaces chain)
Shifting system		Automatic
Max design speed	km/h	25
Colour options		Forged-carbon black / Geranium Pink / Dynamic Green (colour and spec to order)
Operating temperature	°C	-20 ~ +45
Warranty	months	24

4. SC31 Mid-Drive Motor



Motor type		Brushless DC mid-drive motor (BLDC)
Rated voltage	V	36
Rated power	W	250
Peak power	W	460
Rated current	A	7
Peak current	A	13
Peak torque	N • m	95
Max assist ratio	%	350
Assist cut-off speed	km/h	25

Output speed (crank)	RPM	110
Peak efficiency	%	83
Assist levels	levels	3
Sensor type		Torque sensor
Assist response time	ms	20
Cadence detection range	RPM	120
Communication protocol		UART
Smart connectivity		NFC / App / Bluetooth
OTA update		Offline firmware update only
Drivetrain compatibility		Compatible with all shifting systems
IP rating		IPX6
Noise level	dB(A)	< 55
Motor net weight	kg	3.6
Motor dimensions (D × L)	mm	114 × 117
Design lifespan	km	50,000
Operating temperature	°C	-20 ~ +45

5. Battery & Charging

Battery type		Removable lithium battery
Battery voltage	V	36
Battery capacity	Ah	NIM 01: 7 NIM 02: 10
Battery net weight	kg	2.9
Charger input		AC 220V
Charger output		DC 42V
Charging time	hours	4 – 6
Shipping		Battery ships separately as UN3480 Class 9

Range test conditions: 70 kg rider, 25 °C ambient, 25 km/h, flat road. Actual range varies with load, gradient, assist level and temperature.

6. Certification Status

Region	Standard	Status
Europe	CE / EN15194	In progress
China	CCC / GB17761	In progress
USA	UL2849	In progress
Hazardous substances	RoHS	In progress

7. Smart System



8. Packaging & Shipping

Packing		Carton, 1 unit per carton
Carton size (L × W × H)	mm	775 × 420 × 770
Gross weight per carton	kg	23

9. NFC Verification

VELOFOLDGROUP X HunterTag

SMART RIDE. SAFE & VERIFIED.

NFC Verification for Peace of Mind.

VELOFOLDGROUP x HunterTag
Strategic Partnership — Covering
All EU Member States.

Bike Verified
Authentic tap to verify identity.
QERYU VIN
Verify your bike's activation status in seconds.

Anti-Theft Protection | No App Required | Verify in Seconds | Smart. Secure. Sustainable.

In partnership with HunterTag, covering all EU member states. An NFC authenticity tag is built into the frame — no app required: tap your phone on the tag to verify the bike and its activation status in seconds.

Note: compiled from the KEYU E-Bike Product Specification (KY-PS-2026-001), updated 7 October 2026. Figures are laboratory test data; actual performance varies with riding conditions, load, road surface and temperature. Specifications are subject to change without notice.