

**SEGWAY**  
*Discovery*



Addendum 1

# SPEC of Net-Scooter

**Specification of Net-Scooter**  
**Version 1.1 2018-09-13**



|                      | Item                  | Specification                                    |
|----------------------|-----------------------|--|
| Main Parameters      | Max. Speed            | 25km/h(15.5mph)                                  |
|                      | Typical Range         | 45km(28miles)                                    |
|                      | Max. Slope            | 15%  |
|                      | Traversable Terrain   | asphalt/flat pavement; obstacles<1 cm; gaps <3cm |
|                      | Net Weight            | 13.5kg (IoT and battery include)                 |
|                      | Tire                  | Rubber solid tire                                |
|                      | Shock-absorption      | Spring Shock-absorption                          |
|                      | Brake                 | Electronic + rear fender mechanical brake        |
|                      | Duration of Charging  | about 7 hrs                                      |
|                      | Payload               | ≤100kg   |
|                      | IP Rating             | IP54 for Vehicle, IP66 for battery               |
|                      | Light                 | Built-in 1.5W LED light                          |
|                      | Tale Light            | Always on red light, flash during brake          |
|                      | Ring bell             | Yes  |
|                      | Operating Temperature | ~-10 - 40 ° C                                    |
|                      | Storage Temperature   | - 20~50°C  |
| Dimensions L × W × H | 102cm * 43cm * 113cm  |  |

## Vehicle Design Description



| Structure         |                           | Description                 |
|-------------------|---------------------------|-----------------------------|
| Foldable          |                           | Non foldable                |
| Handgrip material |                           | TPR                         |
| Front wheel       | Front-wheel driven method | driving wheel and hub motor |
|                   | Size                      | 8 inch                      |
|                   | Type                      | Solid tire                  |
|                   | Shock-absorption method   | Spring                      |
|                   | Brake                     | Electronic                  |
| Rear wheel        | Rear-wheel driven method  | Engaged wheel               |
|                   | Size                      | 7.5 inch                    |
|                   | Type                      | Solid tire                  |
|                   | Shock-absorption method   | No                          |
|                   | Brake                     | Foot brake by rear fender   |
| Main frame        | Material                  | Aluminum alloy              |
|                   | Parking                   | Parking stand               |
|                   | Reflect sticker           | 3M Diamond Red Sticker      |
|                   | Max steering angle        | 60° (each side)             |
|                   | Rear tale light           | Yes                         |
|                   | Foot pad material         | silicon                     |

Mechanical Control



|                    |                | Software function                                 | Description  |
|--------------------|----------------|---|--|
| Electronic control | Battery        | Nominal voltage                                   | 36.8V  |
|                    |                | Max. Charging voltage                             | 42V  |
|                    |                | Nominal Capacity                                  | 5000mAh/187Wh  |
|                    |                | Charging Temperature                              | 0~40°C   |
|                    |                | Light color                                       | Atmosphere red light   |
|                    |                | Battery Management System                         | Over-heating, short circuit, over-current and over-charge protection |
|                    | Charger        | Input Voltage                                     | 100-240V <sup>~</sup> 50/60Hz  |
|                    |                | Output Voltage                                    | 42V DC   |
|                    |                | Output Current                                    | 1.7A   |
|                    |                | Output Power                                      | 71W  |
|                    | Motor          | Type  | Hall Brushless DC Motor  |
|                    |                | Nominal Power                                     | 300W   |
|                    |                | Max. Power  | 700W   |
|                    | System Control | Turn On-Off                                       | Software Protocol+ Electronic Control                                |
|                    |                | Riding Modes Switch                               | Physical button in dashboard   |
|                    |                | Front light Switch                                | Physical button in dashboard   |
| Glide to start     |                | Motor only engage after scooter reach speed 3km/h |  |

|                       | Item   | Specification                               |
|-----------------------|--|---|
| IoT device            | Cloud Communications   | Connected to the server through TCP socket  |
|                       | 4G Communications  | SIM7600                                     |
|                       | Bands of Northern America Version(US, Canada)                              | FDD-LTE B2/B4/B12                           |
|                       |  | UMTS/HSPA+ B2/B5                            |
|                       | Bands of EMEA Version<br>(EMEA/Korea/Thailand)                             | FDD-LTE B1/B3/B5/B7/B8/B20                  |
|                       |  | TDD-LTE B38/B40/B41                         |
|                       |  | UMTS/HSPA+ B1/B5/B8                         |
|                       |  | GSM/GPRS/EDGE 900MHz/1800MHz                |
|                       | Bands of Australia Version<br>(Australia/New Zealand/South America/Taiwan) | FDD-LTE B1/B2/B3/B4/B5/B7/B8/B28            |
|                       |  | TDD-LTE B40                                 |
|                       |  | UMTS/HSPA+ B1/B2/B5/B8                      |
|                       |  | GSM/GPRS/EDGE 850MHz/900MHz/1800MHz/1900MHz |
|                       | Bands of Japan(Japan)  | FDD-LTE B1/B3/B8/B18/B19/B26                |
|                       | Connectivity/BLE   | BLE4.0 (2402-2480MHz) (Auxiliary unlocking) |
|                       | GNSS   | GPS+GLONASS/GPS+BDS                         |
| Antenna Efficiency    | Celluar>40%; GPS>70%   |   |
| Unlocking Time        | 1-3s   |   |
| Geolocation Precision | ≤15m (open ground, sunny unobstructed)                                     |   |
| Geolocation Time      | Hard/Cold Boot <35s; Soft/Warm Boot<1s (open field)                        |   |

|                |   |  |
|----------------|---|--|
| IoT device     | Cellular antenna (European version of the antenna)            | Reference IOT European Antenna Parameter Table     |
|                | Voice Prompts   | Factory Defaults; Volume:70-90dB                   |
|                | Motion Detection  | Triaxial Accelerometer                             |
|                | Operating Temperature   | -20°C ~ 60°C                                       |
|                | Storage Temperature   | -40°C ~ 70°C                                       |
|                | Operating Humidity  | 93%RH  |
|                | IP Rating   | IPX7   |
|                | Unlocked state current  | <40mA (36VDC average current)                      |
|                | Lock state (standby) current                                  | <5mA (36VDC average current)                       |
|                | Battery&Communication Interfaces                              | 5pin:36V,GND,TX (TTL),RX (TTL), Power_control_wire |
|                | Battery Supply Voltage  | 36VDC  |
|                | Built-in Lithium Battery                                      | 3.7V/1000mAH                                       |
|                | Backup Battery Life   | >2h  |
|                | Dimensions  | 170 X 80 X 56mm                                    |
|                | Housing Material  | PC+10%GF   |
| Certifications | FCC/CE/*other customized certifications for different demands |  |