

## AGIBOT X2 Humanoid Robot — Technical Specification Sheet

| Category               | Specification                                  | X2                                                                                                    | X2 Ultra                                                                                                 |
|------------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Basic Information      | Material                                       | Aluminum alloy + Magnesium alloy + High-strength engineering plastic + Foamed PU                      |                                                                                                          |
|                        | Standing Dimensions (L x W x H) <sup>[1]</sup> | 1310mm x 460mm x 210mm ±30mm                                                                          |                                                                                                          |
|                        | Package Dimensions(L x W x H)                  | 945mm x 705mm x 475mm                                                                                 |                                                                                                          |
|                        | Net Weight (With battery & end effector)       | Appro. 35Kg                                                                                           | Appro. 39Kg                                                                                              |
|                        | Gross Weight(Package Weight)                   | Appro.63.5Kg                                                                                          | Appro. 67.5Kg                                                                                            |
|                        | Typical Power Consumption                      | Appro. 240W                                                                                           |                                                                                                          |
|                        | Operating Temperature <sup>[2]</sup>           | -10°C ~ 40°C                                                                                          |                                                                                                          |
|                        | Battery Capacity <sup>[3]</sup>                | Appro. 500Wh                                                                                          |                                                                                                          |
|                        | Endurance <sup>[4]</sup>                       | Appro. 2h                                                                                             |                                                                                                          |
| Performance Parameters | Charging Time <sup>[5]</sup>                   | Appro. 1.5h                                                                                           |                                                                                                          |
|                        | Walking Velocity                               | Running: ≤1.8m/s                                                                                      |                                                                                                          |
|                        | Max Payload <sup>[6]</sup>                     | 3kg (EU weight not included)                                                                          |                                                                                                          |
|                        | EU Support Type                                | Artificial Hand                                                                                       | Artificial Hand<br>OmniPicker<br>OmniHand                                                                |
|                        | Max step crossing height                       | 50mm                                                                                                  |                                                                                                          |
|                        | Obstacle clearance capacity                    | 50mm                                                                                                  |                                                                                                          |
|                        | Climbing capacity                              | ±10°                                                                                                  |                                                                                                          |
|                        | Minimum turning channel width                  | 900mm                                                                                                 |                                                                                                          |
|                        | Active DOF Numbers                             | 25                                                                                                    | 30                                                                                                       |
| Joint Parameters       | DOF distribution                               | Arm: 5<br>Waist: 3<br>Leg: 6                                                                          | Head: 1<br>Arm: 7<br>Waist: 3<br>Leg: 6                                                                  |
|                        | Joint Max Torque                               | 120N.m                                                                                                | 120N.m                                                                                                   |
|                        |                                                |                                                                                                       |                                                                                                          |
| Sensors                | Visual Sensor                                  | Interactive RGB Camera x1                                                                             | Interactive RGB Camera x1<br>Stereo RGB Camera x1<br>RGBD Camera x1<br>3D LiDAR x1<br>Rear RGB Camera x1 |
|                        | Motion Sensor                                  | 6-axis IMU x1                                                                                         |                                                                                                          |
| Function List          | Basic Function Unit                            | RK3588s x1 & RK3588 x1                                                                                |                                                                                                          |
|                        | Development Computing Unit                     | N / A                                                                                                 | Orin NX 16GB                                                                                             |
|                        | Control Methods <sup>[7]</sup>                 | Remote Control<br>App Control (AGIBOT Go)<br>Voice Control                                            |                                                                                                          |
|                        | Built-in actions                               | ≥20                                                                                                   |                                                                                                          |
|                        | Debug Port                                     | USB Type-C x1<br>USB Type-A x1                                                                        | USB Type-C x2<br>USB Type-A x2<br>RJ45 x2                                                                |
|                        | Power Interface                                | 12V / 3A x1 & 48V / 5A x1                                                                             | 12V / 3A x1 & 48V / 5A x1                                                                                |
|                        |                                                |                                                                                                       |                                                                                                          |
| Accessories            | Package Accessories                            | · Robot Unit x1<br>· Quick Start Guide x1<br>· Battery & Charger x1<br>· Certificate of Conformity x1 |                                                                                                          |
| Warranty               | Warranty Time                                  | 8 Months                                                                                              | 1.5 Year                                                                                                 |

### Notes:

- [1] Measured when the robot is standing in force-control standing mode;
- [2] At -10 °C, the robot will experience performance and endurance degradation;
- [3] The battery capacity is a typical value, and there are differences between different robot unit;
- [4] Obtained through low-speed walking test in the normal temperature and pressure environment of AGIBOT Laboratory;
- [5] The time it takes to charge from 15% battery to 100% in the normal temperature and pressure environment of AGIBOT Laboratory;
- [6] Measured in a specific posture under normal temperature and pressure environment in the AGIBOT Laboratory;
- [7] Control Priority: Remote Control > App > Voice;