

INDUSTRIAL PRODUCT DATASHEET

RobStride 01 QDD 17N.m integrated actuator module

RobStride 01 QDD 17N.m integrated actuator module: a 380g, 17 N.m peak torque actuator with 14-bit absolute magnetic encoder and 1 Mbps CAN bus control.

SKU

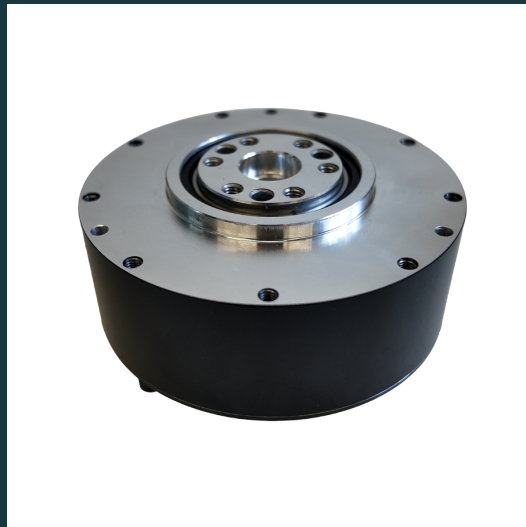
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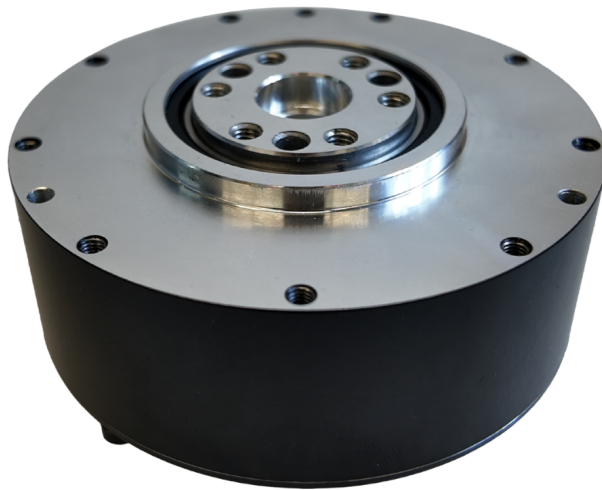
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PRICE

\$130.00(Excl. VAT)



Overview



The RobStride 01 QDD 17N.m integrated actuator module combines a motor, driver electronics, planetary gearbox, and encoder into a compact 380g unit. It provides 17 N.m peak torque with 44.73 N.m/Kg torque density through a 7.75:1 planetary reduction gear, supports 24–48V operation (36V rated), and includes a 14-bit absolute magnetic encoder and 1 Mbps CAN communication.

Key Features

- **Highly Integrated Design**

Combines motor, driver electronics, planetary gearbox, and encoder into a compact actuator weighing only 380g.

- **High Torque Density**

Delivers **17 N.m peak torque** with **44.73 N.m/Kg torque density**, enabling powerful actuation in compact robotic systems.

- **Efficient Planetary Gear System**

Utilizes a **7.75:1 machined planetary reduction gear** to provide stable and smooth torque output.

- **Precision Magnetic Encoder**

Integrated **14-bit absolute magnetic encoder** provides high-precision position feedback.

- **Wide Voltage Compatibility**

Supports **24–48V operating voltage** with **36V rated voltage**, ideal for battery-powered robots.

- **CAN Bus Communication**

Supports **1 Mbps CAN communication** for reliable control in multi-joint robotic systems.

Product Gallery

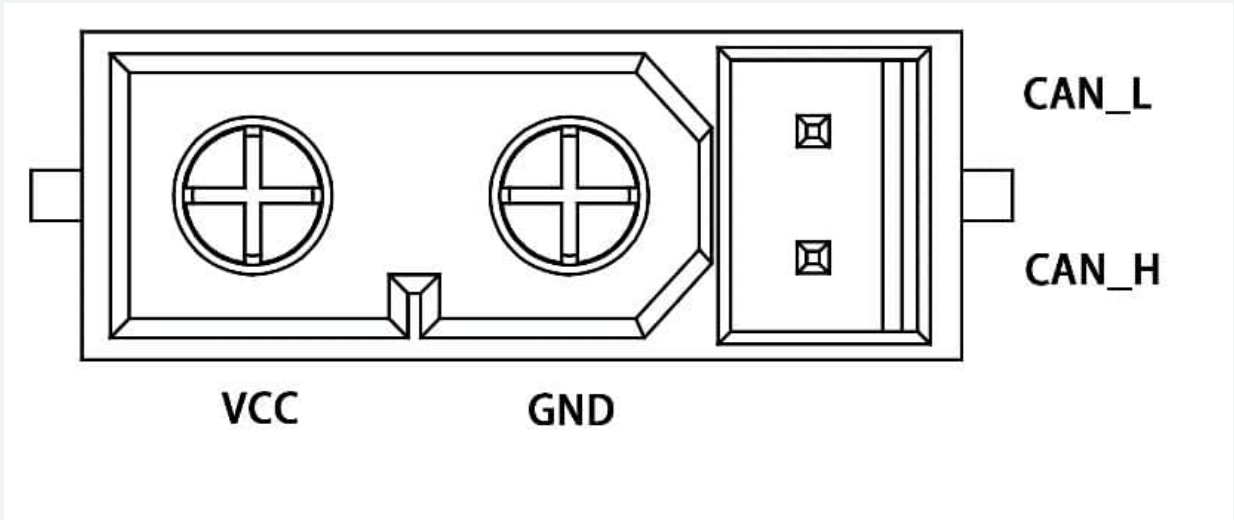
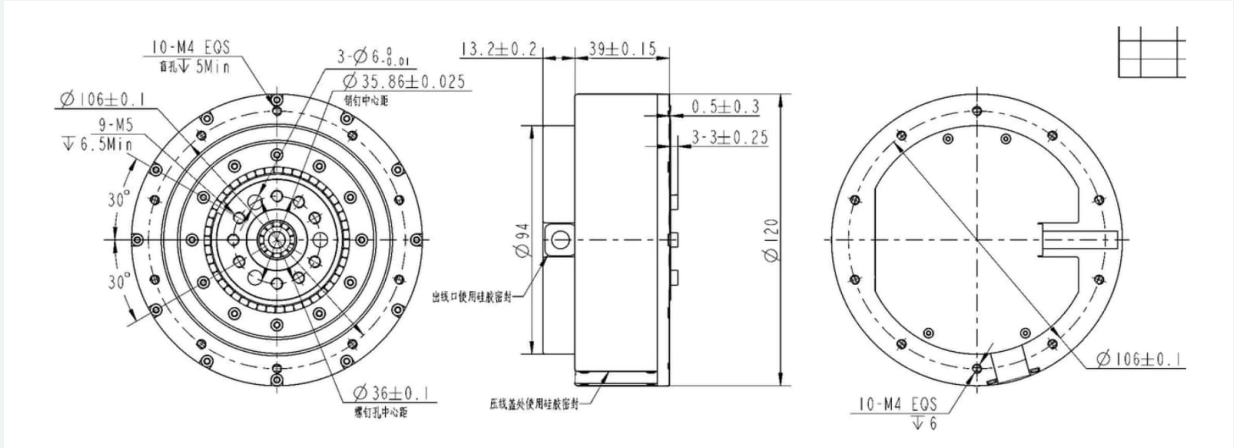


Specification

Item	Specification
Product	RobStride 01 Motor
Voltage Range	24-48V (Rated 36V)
Operating Temperature	-20°C ~ 50°C
Mechanical Dimension	78.5mm × 78.5mm × 40mm
Communication Interface	CAN (1 Mbps)
Gear Ratio	1:7.75
Rated Output Power	170W ± 10%
Rated Torque	6 Nm
Peak Torque	17 Nm
Poles	28
Phases	3
Driver Method	FOC
Weight	380g ± 3g
Encoder	14-bit Absolute Magnetic Encoder x 1

Protection Level	IP52 (Customizable to IP67)
Terminal Interface	XT30PB

Hardware Overview



Part List

RobStride 01 Motor	x1
XT30(2+2) Cable	x1

Compliance & Logistics



HSCODE	8501310000
USHSCODE	8501316000
UPC	
EUHSCODE	8501109390
COO	CHINA

FCC Requirement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
 - (2) this device must accept any interference received, including interference that may cause undesired operation.
- 15.21

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy.

If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Resource Links

- <https://www.seeedstudio.com/Robostride-01-Actuator-p-6773.html>
- [Datasheet](#)
- [3D model](#)
- [Wiki](#)

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