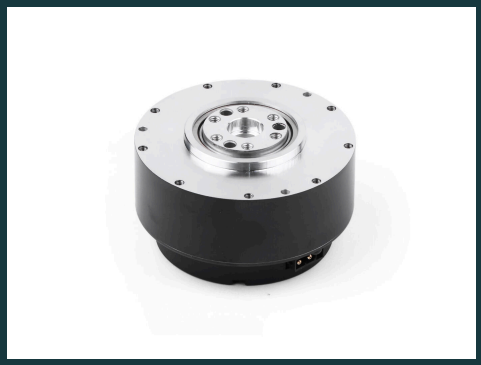
seeed studio

INDUSTRIAL PRODUCT DATASHEET

RobStride 02 QDD 17N.m integrated actuator module (Dual Encoders)

RobStride 02 QDD 17N.m integrated actuator module with dual encoders, 405g four-in-one design, 24–60V input, and 17 N.m peak torque for high-performance quadruped and humanoid robots.

SKU	UPDATED	PRICE
100064875	2026-09-15 11:27:14	$145.00(Excl. VAT)



Overview



The RobStride 02 QDD 17N.m integrated actuator module combines motor, driver circuitry, planetary reducer, and dual 14-bit magnetic encoders in a compact 405g four-in-one design. It supports 24–60V input (optimized for 48V systems), delivers 17 N.m peak torque with a 7.75:1 reduction ratio, and uses XT30PB terminals for stable high-current power and signal transmission.

Key Features

- **Highly-integrated** Includes motor, driver circuitry, planetary reducer, and dual magnetic encoders in a compact 405g four-in-one design
- **Reliable Connection** Equipped with XT30PB electrical terminals ensuring stable high-current power and signal transmission
- **Dual Encoder** Features 14-bit dual magnetic encoders for high-precision feedback and control
- **Wide Voltage Compatibility** Supports 24-60V input range, perfectly optimized for 48V battery-powered robotic systems
- **High Torque Density** Delivers 17 N.m peak torque with a 7.75:1 reduction ratio, ideal for high-performance quadruped and humanoid robots

Product Gallery





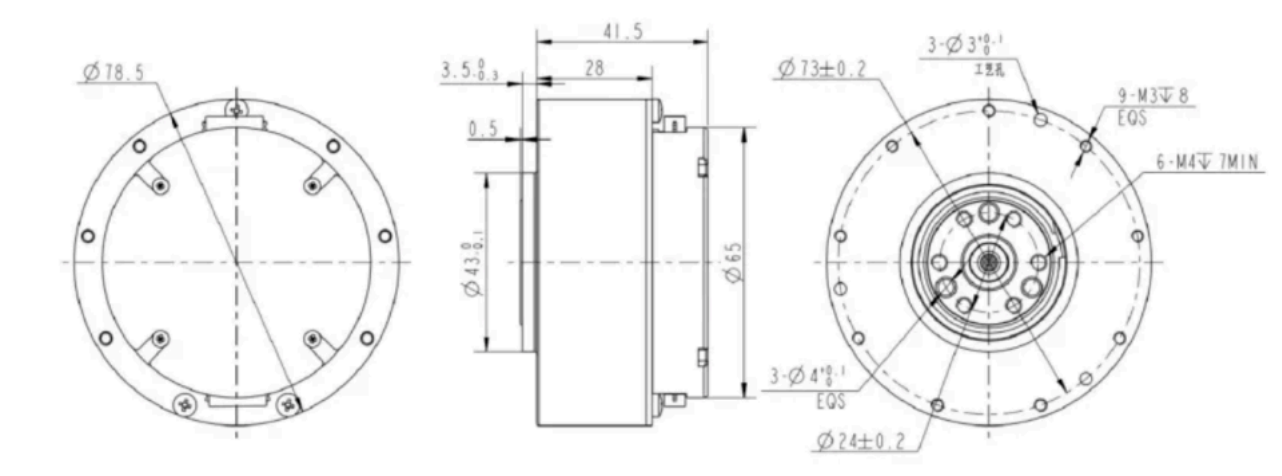


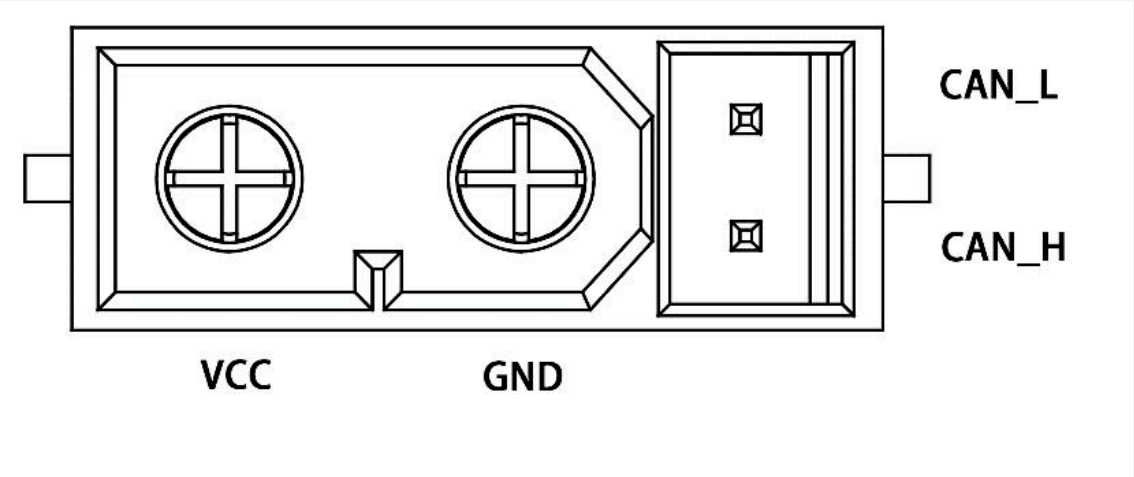


Specification

Product	Hightorque HTDW-5047-20 Motor
Voltage Range	24-60V
Operating Temperature	-20℃~50℃
Mechanical Dimension	78.5mm x 78.5mm x 45.5mm
Communication Interface	CAN (1Mbps)
Gear Ratio	1:7.75
Rated Output Power	170 W
Rated Torque	6 Nm
Peak Torque	17 Nm
Pole pair	14

Hardware Overview





Part List

RobStride 02 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-02-Actuator-p-6665.html
- https://files.seeedstudio.com/products/RobStride/%E7%81%B5%E8%B6%B3%E6%97%B6%E4%BB%A3%E4%BA%A7%E5%93%81%E8%A7%84%E6%A0%BC%E4%BB%8B%E7%BB%8D%20RobStride%20Produc
- https://files.seeedstudio.com/products/RobStride/Product%20Literature/RS02/RS02User%20Manual251112.pdf
- https://files.seeedstudio.com/products/RobStride/Product%20Literature/RS02/RS02.step
- RobStride Motor Control Complete Guide | Seeed Studio Wiki

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