seeed studio

INDUSTRIAL PRODUCT DATASHEET

Fashionstar RX8-U50H-M servo

Fashionstar RX8-U50H-M servo: an integrated brushless servo with 12-bit absolute encoder, angle memory, smooth motion control, and comprehensive protection for robotic arm applications.

SKU	UPDATED	PRICE
114090077	2026-09-23 09:15:26	$112.00(Excl. VAT)



Overview



The Fashionstar RX8-U50H-M servo features an integrated design combining a brushless motor, reducer, magnetic absolute encoder, and controller. It offers a 12-bit absolute encoder with angle memory, smooth trapezoidal motion control, and comprehensive protection functions for robotic arm applications.

Key Features

- **Integrated Design** Provides Integrated design of brushless motor, reducer, magnetic absolute encoder and controller
- **12-bit absolute encoder** Includes 12-bit magnetic absolute encoder, supporting arbitrary angle setting as the zero-position and multi-turn angle control
- **Angle memory** Ensures position data is retained after power-off.
- **Smooth motion curve** Trapezoidal acceleration and deceleration control profile generates a smoothed motion curve
- **Comprehensive protection features** Provides comprehensive protection functions including thermal shutdown, voltage protection, stall detection, and current/power limitation

Product Gallery



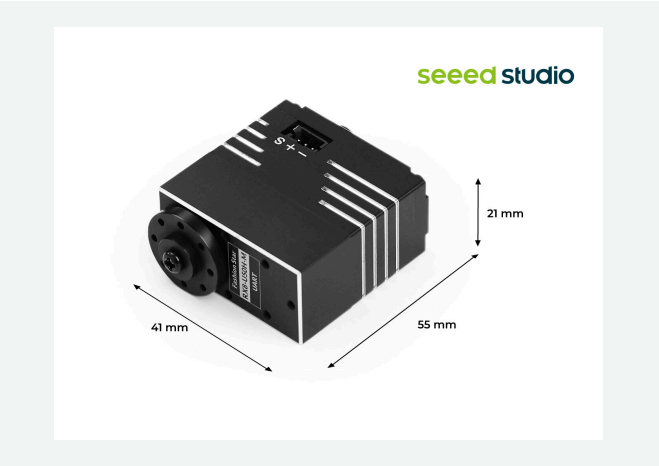








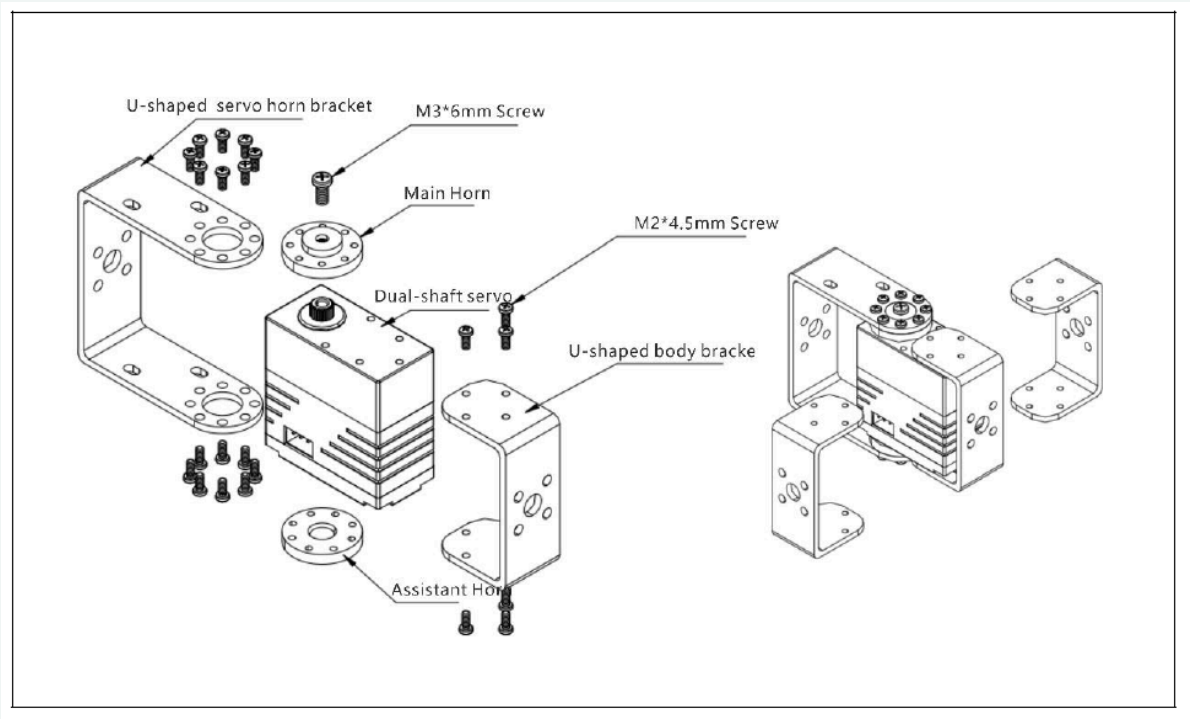


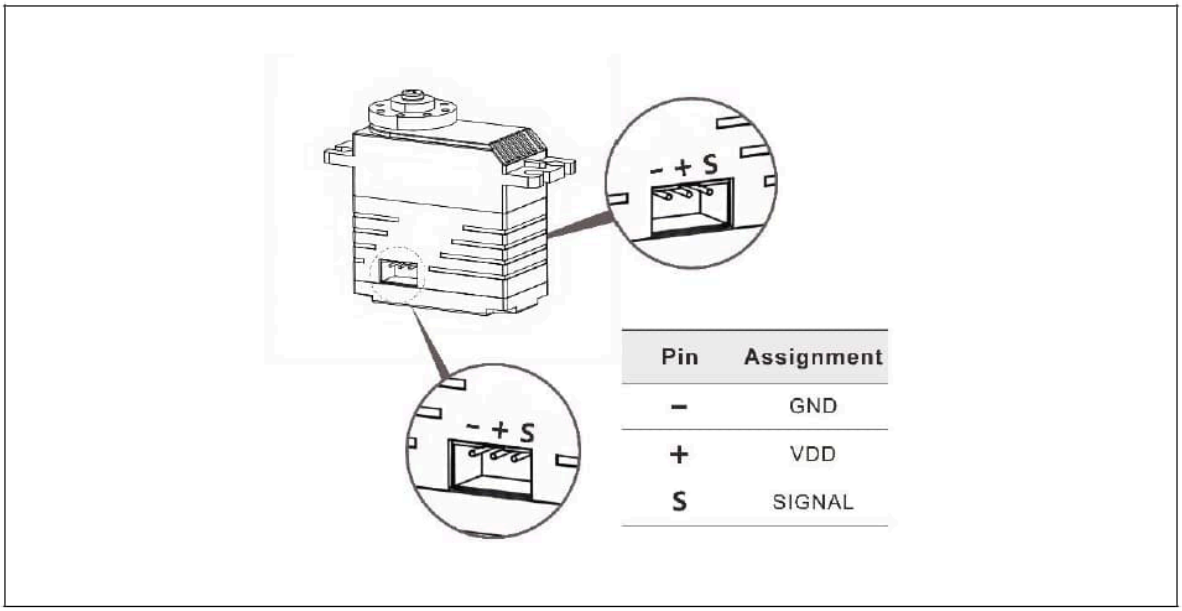


Specification

Product	Fashionstar RX8-U50H-M
Voltage	9V ~ 12.6V
Operating Temperature	-10℃~60℃
Mechanical Dimension	40mm x 40mm x 20mm
Communication Interface	UART/TTL Half-Duplex
Baud rate	9,600bps~1Mbps
Resolution	0.088°
Operating Mode	Single-turn Angle Control Mode Multi-turn Angle Control Mode Damping Mode
Max Stall Torque	4.9N·m (50kg-cm)
Max Continuous Torque	2.26N·m (23kg-cm)
Rated Speed	52rpm (0.192sec@60°)

Hardware Overview





Pin	Assignment
–	GND
+	VDD
S	SIGNAL

Applications

- **Robotic Arm**

Part List

RX8-U50H-M Servo	x1
Horn	x2
PM M3*6mm Screw	x1
PM M2*4.5mm Screw	x26
200mm 3-pin Cable (PH2.0×2)	x1

Compliance & Logistics

HSCODE	8501109990
USHSCODE	8501106080
UPC	
EUHSCODE	8501109390
COO	

Resource Links

- https://www.seeedstudio.com/Fashionstar-RX8-U50H-M-Servo-p-6516.html
- Datasheet
- CAD

Seeed Technology Co.,Ltd.
9F, Building G3, International E City,
Zhongshanyuan Road, Nanshan, Shenzhen, China

Tel: +86 0755-80695676
Web: www.seeed.cc
Shop: www.seeedstudio.com