

S20-180 Eco

S Series robot redefines programming mode, establishing a shared safety space between humans and robots. Through seamless integration with AI, it delivers flexible manufacturing solutions for enterprises, embodying unparalleled intelligence, efficiency, safety and reliability.

20_{kg}

Payload

1777.5_{mm}

Reach

63_{kg}

Weight

±0.05_{mm}

Repeatability

✓ TRUSTED SAFETY

- Emergency stop, incl. STO, SBC, conforms to EN ISO 10218-1, EN ISO 13849-1 Pld.Cat.3.
- Sensitive to collisions.
- Brakes built into all axes.

📶 ADVANCED MOTION CONTROL

- Paired with the speed of traditional industrial robot.
- Precision upgraded to industrial robot level through accurate calibration and compensation.
- Identification and compensation of high precision kinematic models ensure both accurate trajectory and smooth movement.

🔗 FLEXIBLE USABILITY

- Built-in torque sensor, supporting by wizard force control kit.
- Easy handling with enhanced precision for point-to-point and trajectory programming.
- Mastering the robot in 60 minutes via graphical UI and intuitive hand guiding.
- Integrated vision system, capable of running in unstructured and dynamic automation.

🔒 QUALITY SYSTEM

- Comprehensive manufacturing quality management system.
- Rigorous manufacturing quality control & inspection.
- Kinematic calibration before shipment to ensure absolute accuracy.
- 100+ design type tests, 20+ delivery inspections, 120 hours continuous no failure operating before shipment.

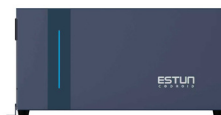


S20-180 Eco

Technical specification



Control Cabinet



Model	S20-180 Eco
DOF	6
Payload (kg)	20
Reach (mm)	1777.5
Repeatability (mm)	±0.05
Weight (kg)	63
Safety	Hand guide, adjustable collision detection
Certification	EN ISO 13849-1 PLd Cat.3 & EN ISO 10218-1
IP Classification	IP54 (Default), IP67 (Option)
Max. Speed at Tool End (m/s)	3.2
Working Range	Axis 1/2/4/5/6: ±360° Axis 3: ±160°
Max. Speed	Axis1/2: 110 °/s Axis3: 150 °/s Axis4/5/6: 180 °/s
Mounting	Any orientation
Operating Temp.	0 – 50 °C
Operating Humidity	70% RH
Flange Connector	ISO 9409-1-50-4-M6
Flange Communication	2 DI, 2DO, 24VDC, RS485

Power supply	AC	100~240V 50/60Hz
	DC	48V (-15%~+0%)
IP classification		IP20
Working condition		Temperature: 0~50°C Humidity: 10~90%RH, Non-condensing
Communication interface	Default	MODBUS TCP, RS485, TCP/IP
	Option	ProfiNET (Slave), EtherNet/IP (Slave)
	Power supply	24V, 2A
IO interface	Digital	DI: PNP/NPN, 16 channels, DO: PNP, 16 channels
	Analog	4 channels, AI: Current mode/voltage mode AO: Current mode/voltage mode
	Safety interface	Safety emergency stop input, 4 channels Safety emergency stop output, 1 channel
Redevelopment		Remote Script, API
Cabinet dimension		370*230*190mm
Cable length		Robot-Cabinet: 3m, Cabinet power cable: 3m, Handle: 5m Heavy-duty Line: 6/12/20m, Flexible Line: 3/6/15/20m (Option)
Wi-Fi		Option

End Effectors

Various end effectors can be quickly switched to match multiple industry applications



Handling



Screw fastening



Polishing



Welding



Spraying

Teach Pendant optional

Weight (Without cables)	1.24kg
Display Size	10.1 inch
Cable	5m



Technical Drawings

