

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.

20kg**1777.5mm**

Payload

Reach

63kg**±0.05mm**

Weight

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



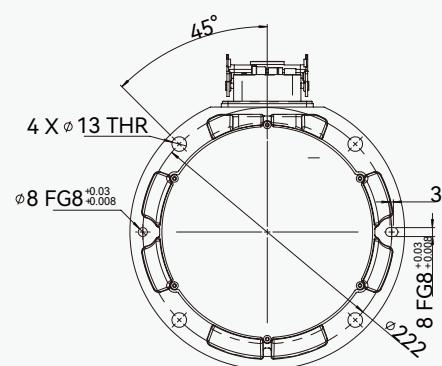
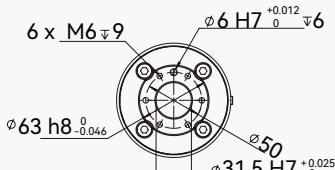
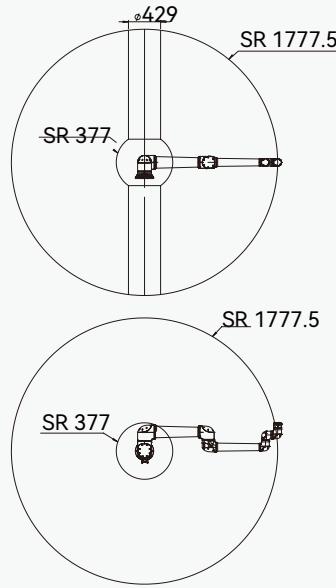
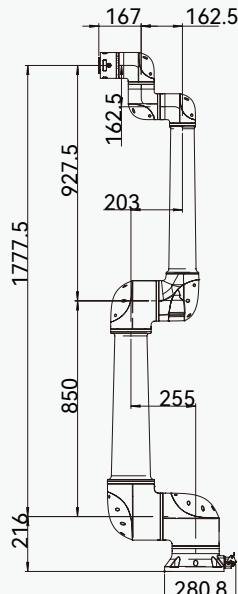
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|------------------------------|---|----------------|-------------------------|---|--|
| Model | S20-180 Eco | | Power supply | AC | 100~240V 50/60Hz |
| DOF | 6 | | DC | 48V (-15%~+0%) | |
| Payload (kg) | 20 | | IP classification | IP20 | |
| Reach (mm) | 1777.5 | | Working condition | Temperature: 0-50°C Humidity: 10~90%RH, Non-condensing | |
| Repeatability (mm) | ± 0.05 | | Communication interface | Default | MODBUS TCP, RS485, TCP-IP |
| Weight (kg) | 63 | | Option | Profinet (Slave), EtherNet/IP (Slave) | |
| Safety | Hand guide, adjustable collisiondetection | | Power supply | 24V, 2A | |
| Certification | EN ISO 13849-1 PLd Cat.3 & EN ISO 10218-1 | | IO interface | Digital | DI: PNP/NPN, 16 channels, DO: PNP, 16 channels |
| IP Classification | IP54 (Default), IP67 (Option) | | Analog | 4 channels, AI: Current mode/voltage mode | |
| Max. Speed at Tool End (m/s) | 3.2 | | | AO: Current mode/voltage mode | |
| Working Range | Axis 1/2/4/5/6: $\pm 360^\circ$ | | Safety interface | Safety emergency stop input, 4 channels | |
| Max. Speed | Axis1/2: 110 °/s | Axis3: 150 °/s | Axis4/5/6: 180 °/s | Safety emergency stop output, 1 channel | |
| Mounting | Any orientation | | Redevelopment | Remote Script, API | |
| Operating Temp. | 0 – 50 °C | | Cabinet dimension | 370*230*190mm | |
| Operating Humidity | 70% RH | | Cable length | Robot-Cabinet: 3m, Cabinet power cable: 3m, Handle: 5m | |
| Flange Connector | ISO 9409-1-50-4-M6 | | | Heavy-duty Line: 6/12/20m, Flexible Line: 3/6/15/20m (Option) | |
| Flange Communication | 2 DI, 2DO, 24VDC, RS485 | | Wi-Fi | Option | |

End Effectors

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



Technical Drawings



Teach Pendant optional

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

