

# S10-140 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.

**10kg****1400mm**

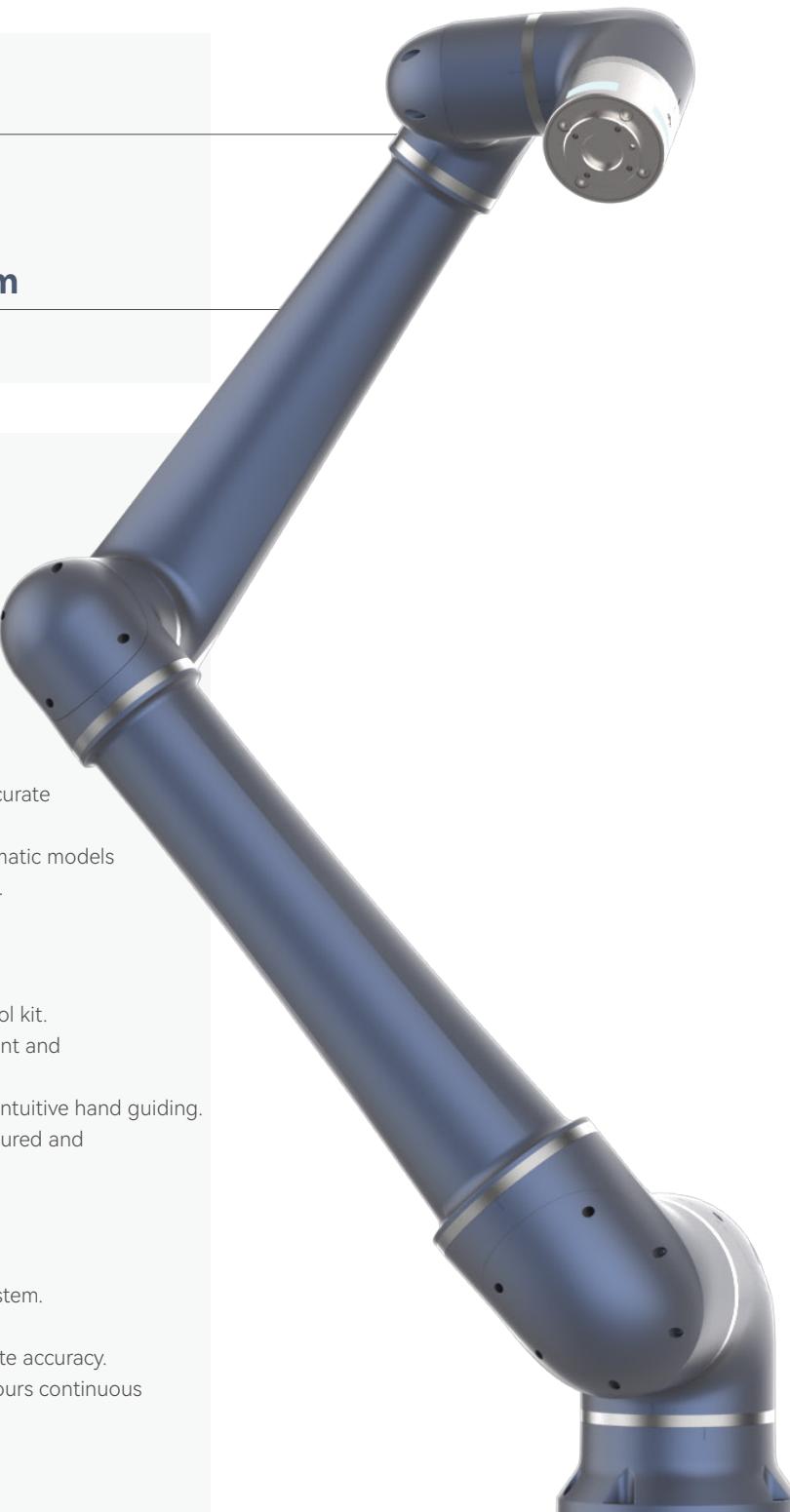
Payload

Reach

**39kg****±0.03mm**

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.

# S10-140 Eco

## Technical specification



Control Cabinet



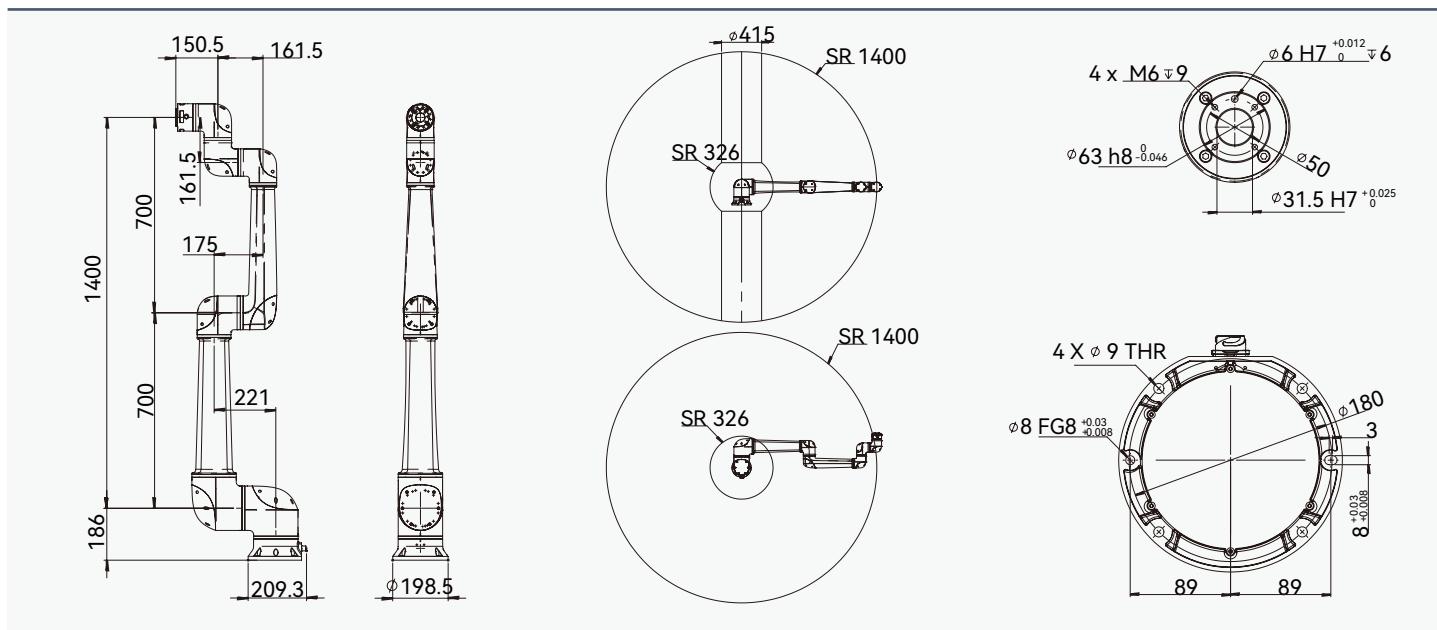
|                              |   |                         |   |
|------------------------------|---|-------------------------|---|
| Model                        | S10-140 Eco                               | Power supply            | AC 100~240V 50/60Hz   |
| DOF                          | 6   | DC                      | 48V (-15%~+0%)  |
| Payload (kg)                 | 10  | IP classification       | IP20  |
| Reach (mm)                   | 1400                                      | Working condition       | Temperature: 0-50°C   |
| Repeatability (mm)           | ±0.03                                     |                         | Humidity: 10~90%RH, Non-condensing                            |
| Weight (kg)                  | 39  | Communication interface | Default MODBUS TCP, RS485, TCP-IP                             |
| Safety                       | Hand guide, adjustable collisiondetection | Option                  | ProfiNET (Slave), EtherNet/IP (Slave)                         |
| Certification                | EN ISO 13849-1 PLd Cat.3 & EN ISO 10218-1 | Power supply            | 24V, 2A   |
| IP Classification            | IP54 (Default), IP67 (Option)             | IO interface            | Digital DI: PNP/NPN, 16 channels, DO: PNP, 16 channels        |
| Max. Speed at Tool End (m/s) | 2.5                                       | Analog                  | 4 channels, AI: Current mode/voltage mode                     |
| Working Range                | Axis 1/2/4/5/6: ±360° Axis 3: ±160°       |                         | AO: Current mode/voltage mode                                 |
| Max. Speed                   | Axis 1/2/3: 150 °/s Axis 4/5/6: 180 °/s   | Safety interface        | Safety emergency stop input, 4 channels                       |
| Mounting                     | Any orientation                           |                         | Safety emergency stop output, 1 channel                       |
| Operating Temp.              | 0 – 50 °C                                 | Redevelopment           | Remote Script, API  |
| Operating Humidity           | 70% RH                                    | Cabinet dimension       | 370*230*190mm   |
| Flange Connector             | ISO 9409-1-50-4-M6                        | Cable length            | Robot-Cabinet: 3m, Cabinet power cable: 3m, Handle: 5m        |
| Flange Communication         | 2 DI, 2DO, 24VDC, RS485                   |                         | 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



### Technical Drawings



### Teach Pendant optional

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

