



**AGILE ROBOTS**



**Yu 5**  
**Industrial**  
technical  
data sheet

# Specifications

## Yu 5 Industrial

<b>Max payload and workspace radius</b>	5 kg payload: 1,083 mm 7 kg payload: 1,000 mm
<b>Protection rating (robot and controller)</b>	IP54
<b>Degrees of freedom</b>	6
<b>Repeatability</b>	± 0.05 mm
<b>Robot weight</b>	31.5 kg
<b>Max linear speed (TCP)</b>	2.0 m/s (with 5 kg payload)
<b>Operating temperature</b>	5 to 40 °C
<b>Operating humidity</b>	80% RH (non-condensing)
<b>Joints</b>	<b>Max Speed</b> <b>Range</b>
1	141 °/s      -220° to 220°
2	141 °/s      -310° to 130°
3	169 °/s      -160° to 160°
4	180 °/s      -310° to 130°
5	180 °/s      -220° to 220°
6	180 °/s      -220° to 220°
<b>Vision</b>	Integrated 2d camera with two high-power LEDs
<b>Sensitivity</b>	Torque sensors in each axis
<b>Machine learning and AI</b>	Integrated neural processing unit (NPU)
<b>Power supply</b>	220 – 230 VAC, 50/60 Hz
<b>Average power consumption</b>	250 W
<b>Full load current</b>	6.3 A (at 230 VAC)

### User interface

Browser based programming interface, integrated Python API with graphical UI-builder, handguiding with 3 programmable buttons

### Safety functions

According to  
EN ISO 13849-1:2015,  
EN ISO 10218-1:2011,  
EN 61508-1:2010,  
EN 61508-3:2010

- ES** Emergency stop
- ED** Enabling device
- OM** Operating mode
- SLDS** Safely limited drive speed
- SLDP** Safely limited drive position
- SLDT** Safely limited drive torque
- SLRP** Safely limited robot power
- SLCP** Safely limited cartesian position
- SLCO** Safely limited cartesian orientation
- SLCS** Safely limited cartesian speed
- PS** Protective stop / Configurable safe I/Os

### Communication and protocols (robot control)

16 DI, 16 DO, 4 AI, 4 AO  
4 safeDI, 4 safeDO  
Ethernet, OPC UA based gateway (SPS, Cloud, etc.)

### Communication and protocols (end effector interfaces)

2A max power consumption (24V)

#### M8-interface (8 pin):

2 DI, 1 DO, 2 AI, 1 DI/O

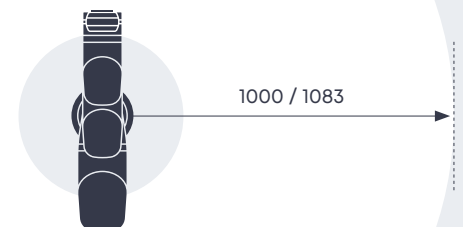
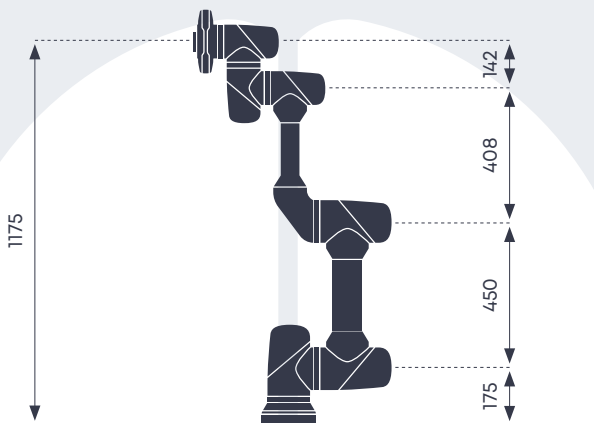
#### Springprobe interface

#### (wireless connection):

2 DI, 3 DO, 2 AI, 1 DI/O

### Hand controller

Emergency stop, Enabling device, Operating mode switch, Power button



© Agile Robots AG  
Staffelseestr. 8  
81477 Munich

+49 89 277 814-101  
welcome@agile-robots.com

Technical data may be subject to change without previous notice.

Please request detailed drawings here:  
sales@agile-robots.com

[www.agile-robots.com](http://www.agile-robots.com)