TM AI Cobot **S Series**

TM30**S**

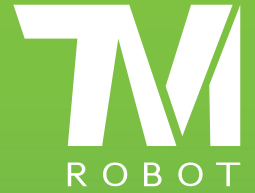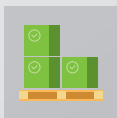**TM ROBOT**

Increased Maximum Load Capacity Up To 35 kg
- With the maximum load increased to 35 kg*, the weight remains lightweight

Expanded Capacity To Handle Heavy Workpieces
- For example, push stack, machine tool material pick and place, and automobile industry assembly

Safe As Always
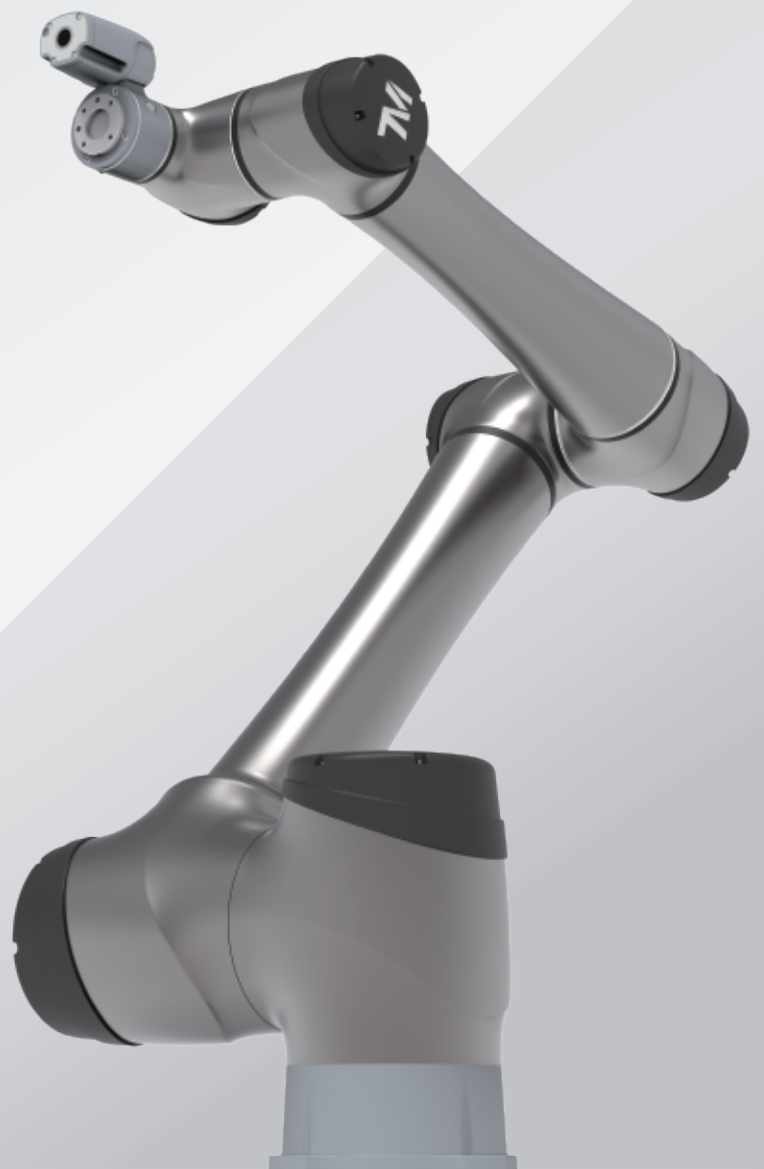- Up to 31 PL=d, Cat.3 safety functions certified by TÜV

*Under the palletizing scenario

Maximum Payload
35 kg

Wide Range
1,702 mm

Specification

Model		TM30S	TM30S-M	TM30S-X
Weight		80.6 kg	80.6 kg	80.3 kg
Payload		30 kg		
Reach		1702 mm		
Joint Ranges	J1, J2, J4, J5, J6	+/- 360°		
	J3	+/- 170°		
Joint Speed	J1, J2	100°/s		
	J3	130°/s		
	J4	195°/s		
	J5	210°/s		
	J6	225°/s		
Maximum Speed		5.2 m/s		
Repeatability		+/- 0.05 mm		
Degrees of Freedom		6 rotating joints		
I/O	Control Box	Digital In: 16 / Digital Out: 16		
		Analog In: 2 / Analog Out: 2		
	Tool Conn.	Digital In: 3 / Digital Out: 3		
		DO_0 (DO-0/AI) / DO_1 (DO-1/RS-485-) / DO_2 (DO-2/RS-485+)		
I/O Power Supply		24V 2.0A for control box and 24V 1.5A for tool		
IP Classification		IP54 (Robot Arm) IP54 (Control Box)	IP54 (Robot Arm)	IP54 (Robot Arm) IP54 (Control Box)
Power Consumption		Typical: 600 watts		
Temperature		0~50°C		
Cleanroom Class		ISO Class 3		
Power Supply		200~240 VAC, 50~60 Hz	48~60 VDC	200~240 VAC, 50~60 Hz
I/O Interface		2×COM, 1×HDMI, 3×LAN, 2×USB2.0, 4×USB3.0		
Communication		RS-232/RS-422/RS-485, Ethernet, Modbus TCP/RTU (master & slave)		
		PROFINET (optional), EtherNet/IP (optional)		
Programming Environment		TMflow (flowchart based/ script based)		
Certification		CE, SEMI S2 (optional)		

AI & Robot Vision			
AI Function	Classification, Object Detection, Segmentation, Anomaly Detection, AI OCR		N/A
Application	Positioning, 1D/2D Barcode Reading, OCR, Defect Detection, Measurement, Assembly Check		
Positioning Accuracy	2D Positioning: 0.1 mm *[1]		
Eye in Hand (Built in)	Auto-focused color camera with 5M resolution, Working distance 100 mm ~ ∞		
Eye to Hand (Optional)	Support Maximum 2×GigE 2D cameras or 1×GigE 2D Camera + 1×3D Camera *[2]		

*[1] The data in this table are measured by TM laboratory and the working distance is 100mm. It should be noted that in practical applications, the relevant values may be different due to factors such as the on-site ambient light source, object characteristics, and vision programming methods that will affect the change in accuracy.
*[2] Refer to the official website of TM Plug&Play for camera models compatible to TM Robot.