TM AI Cobot S Series



TM30S



Increased Maximum Load Capacity Up To $35\,\mathrm{kg}$

• 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	J1, J2, J4, J5, J6		+/- 360°	
Ranges	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,	$1 \times HDMI, 3 \times LAN, 2 \times USB2.0, 4$	×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		
Al Function		Classification, Object Detection, Segmentation, Anomaly Detection, AI OCR		
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 ~ ∞		N/A
Eye to Hand (Optional)		Support Maximum 2×GigE 2D cameras or 1 ×GigE 2D Camera + 1 ×3D Camera $^{*(2)}$		
It shou due to progra	lld be noted that in p factors such as the o mming methods tha	asured by TM laboratory and the working distance is 100mm. actical applications, the relevant values may be different n-site ambient light source, object characteristics, and vision will affect the change in accuracy. If TM Plug&Play for camera models compatible to TM Robot.		