TM5

The most intelligent

Collaborative robot

With built-in vision
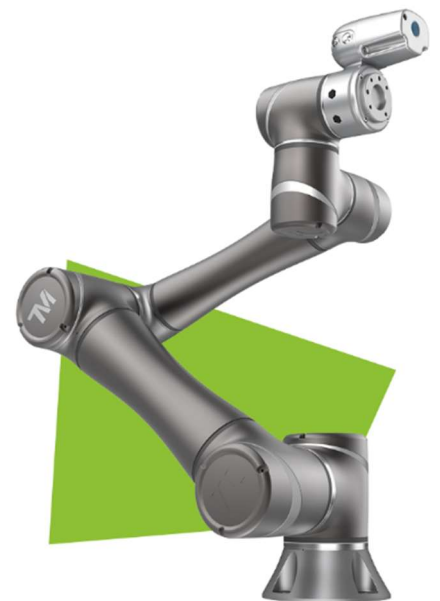
TM5-700

TM5-900

700mm
Reach

900mm
Reach

6kg
Payload

4kg
Payload

Applicable For 3c Industry, Automobile Industry, Food Industry, Etc.

Model		TM5-700	TM5-900	TM5M-700	TM5M-900
Weight		22.1Kg	22.6Kg	22.1Kg	22.6Kg
Payload		6kg	4Kg	6kg	4Kg
Reach		700mm	900mm	700mm	900mm
Typical Speed		1.1m/s	1.4m/s	1.1m/s	1.4m/s
Joint ranges	J1	+/- 270°			
	J2,J4,J5	+/- 180°			
	J3	+/- 155°			
	J6	+/- 270°			
Speed	J1~J2	180°/s			
	J3	180°/s			
	J4~J5	225°/s			
	J6	225°/s			
Repeatability		+/- 0.05 mm			
Degrees of freedom		6 rotating joints			
I/O ports		Control box		Tool conn.	
	Digital in	16		3/4 (by Regional Model)	
	Digital out	16		3/4 (by Regional Model)	
	Analog in	2		1	
	Analog out	1		0	
I/O power supply		24V 1.5A for control box and 24V 1.5A for tool			
IP classification		IP54 (Robot Arm); IP32 (Control Box)			
Power Consumption		Typical 220 watts			
Temperature		The robot can work in a temperature range of 0-50°C			
Power supply		100-240 VAC, 50-60 Hz		DC24V/48V/22~60V (by Reginal Model)	
I/O Interface		3×COM, 1×HDMI, 3×LAN, 4×USB2.0, 2×USB3.0, 1×VGA (by Reginal Model)			
Communication		RS232, Ethernet, Modbus TCP/RTU (master & slave)			
Programming Environment		TMflow, flowchart based			
Certification		CE (by Regional Model), SEMI S2 (Option)			
Variation Models		X: without hand eye camera, SEMI: SEMI S2 certified			
Robot Vision					
Eye in Hand (Built in)		1.2M/5M pixels, color camera			
Eye to Hand (Optional)		Support Maximum 2 GigE cameras			

TM12/TM14

High payload with extended reach

TM12   **TM14**

1300mm	1100mm
Reach	Reach
12kg	14kg
Payload	Payload
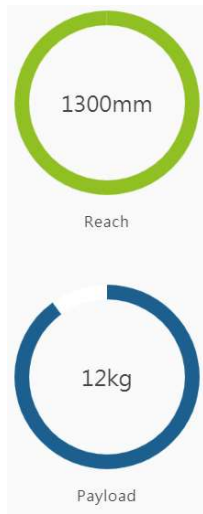
The Highest Load Capability In The TM Product Series

Applicable for semiconductor industry, panel industry, CNC industry, etc.

Model		TM12	TM14	TM12M	TM14M
Weight		33.3Kg	32.6Kg	33.3Kg	32.6Kg
Payload		12kg	14kg	12kg	14kg
Reach		1300mm	1100mm	1300mm	1100mm
Typical Speed		1.3m/s	1.1m/s	1.3m/s	1.1m/s
Joint ranges	J1	+/- 270°			
	J2,J4,J5	+/- 180°			
	J3	+/- 166°	+/- 163°	+/- 166°	+/- 163°
	J6	+/- 270°			
Speed	J1~J2	120°/s			
	J3	180°/s			
	J4~J5	180°/s	150°/s	180°/s	150°/s
	J6	180°/s			
Repeatability		+/- 0.1 mm			
Degrees of freedom		6 rotating joints			
I/O ports		Control box		Tool conn.	
	Digital in	16		4	
	Digital out	16		4	
	Analog in	2		1	
	Analog out	1		0	
I/O power supply		24V 1.5A for control box and 24V 1.5A for tool			
IP classification		IP54 (Robot Arm); IP32 (Control Box)			
Power Consumption		Typical 300 watts			
Temperature		The robot can work in a temperature range of 0-50°C			
Power supply		100-240 VAC, 50-60 Hz		DC 22V~60V	
I/O Interface		3×COM, 1×HDMI, 3×LAN, 4×USB2.0, 2×USB3.0			
Communication		RS232, Ethernet, Modbus TCP/RTU (master & slave)			
Programming Environment		TMflow, flowchart based			
Certification		CE, SEMI S2 (Option)			
Variation Models		X: without hand eye camera, SEMI: SEMI S2 certified			
Robot Vision					
Eye in Hand (Built in)		1.2M/5M pixels, color camera			
Eye to Hand (Optional)		Support Maximum 2 GigE cameras			

Accessory

Air Fitter

External Power Supply

TECHMAN SSD

TM Calibration Pin

TM Calibration Plate

TM Calibration Set

TM End Module IO cable

TM Landmark

TM Mobile Workstation

TM Robot Stand

TM Robot Stick Stand

Built-In Vision System

TM Vision is a built-in system that provides the user with friendly programing functions such as vision recognition, positioning, image enhancement, barcode identification, and so on.

Item detection module

Supports shape-based and image-based pattern matching

Image enhancement module

Supports contract enhancement, image smoothing, morphology, and color plane extraction Barcode identification module.

Barcode identification module

Supports 1-Dashboard, QR code and 2-D DataMatrix decoding.

TMflow
No More Coding!

You can implement your automation task with our innovative flow-based robot editing software. Each function is shown as a different icon and also features an intuitive click & drag method. Users without any coding experience can complete a pick & place program in as little as 5 minutes.
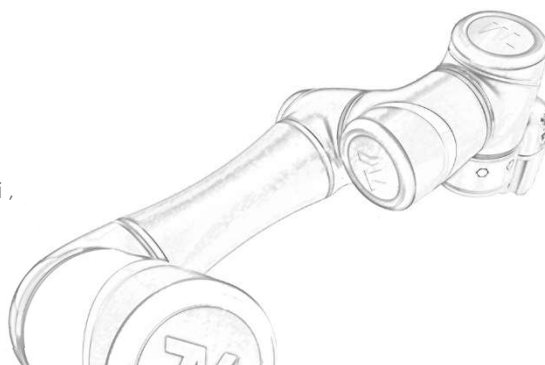
Connexall
Connect Solutions
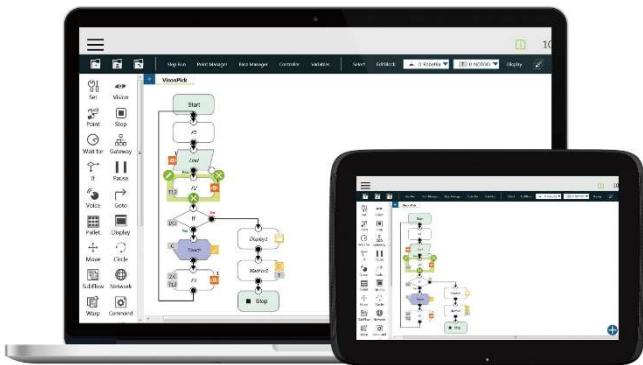
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