



# TM5

## The most intelligent collaborative robot with built-in vision



www.tm-robot.com

### Specification

SEMI S2 ISO 10218-1:2011 ISO/TS 15066:2016 CE



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	Digital In: 16 Digital Out: 16 Analog In: 2 Analog Out: 1			
	Tool Conn.	Digital In: 3/4 (By Regional Model) Digital Out: 3/4 (By Regional Model) Analog In: 1 Analog Out: 0			
I/O power supply		24V 1.5A / 2.0A for control box (by Regional Model) 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		24/48/22-60 VDC (by Regional Model)	
I/O Interface		3×COM, 1×HDMI, 3×LAN, 4×USB2.0, 2×USB3.0, 1×VGA (by Regional 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			
<b>Robot Vision</b>					
Eye in Hand (Built in)		1.2M/5M pixels, color camera			
Eye to Hand (Optional)		Support Maximum 2 GigE cameras			