Product Specifications

Arm Length	**Full length**	600 mm
	First arm	325 mm
	Second arm	275 mm
Working Envelope	**Axis 1**	±140 °
	Axis 2	±152 °
	Axis 3 (Z-axis)	0 ~ 210 mm
	Axis 4 (Z-axial rotation)	±360°
Maximum Speed *1	**Axis 1**	457 °/sec
	Axis 2	672 °/sec
	Axis 3 (Z-axis)	2,000 mm/sec
	Axis 4 (Z-axial rotation)	2,359 °/ssec
	Composite (Axis 1 and 2 composite)	8.017 mm/sec
Standard Cycle Time *2	**(With 2 Kg load)**	0.31 sec
Load	**Maximum payload mass *1**	12 kg
	Allowable moment of inertia *1	0.25 kg·m2 *2
Position Repeatability *3	**X-Y**	±0.01 mm
	Axis 3 (Z-axis)	±0.01 mm
	Axis 4 (Z-axial rotation)	±0.005 °
Hand control signal		8 inputs and 8 outputs
User wiring		16 lines
Hand neumatic tubes		6x4 tubes
Position Detection		Absolute
Robot Controller Cable		3.5 m
Power Supply		4.3 kVA
Mass		31 kg

*1: Acceleration/deceleration rates may be limited according to the motion pattern, load mass and amount of offset.

*2: Horizontal 300 mm, vertical 25 mm, round-trip with coarse positioning. Continuous operation is not possible beyond the effective load ratio.

*3: Positioning repeatable accuracy in one-direction movement, when the environmental temperature is constant. Not absolute positioning accuracy. Positioning repeatability for X-Y and C are for when Z-axis is at the upper-most position. Trajectory accuracy is not ensured.

Controller Specifications

	TS5000 Controller
Series	THE
Teach Pendant	TP1000, TP5000
Power Supply	Single phase 190-240VAC @ 50/60Hz
Max Power Capacity	4.3kVA
Dimensions	365W x 161H x 350D
Mass	11kg
Storage	512 programs 2.5mil points 2.5mil steps
CE Version	Available Q4:2020
USER I/O Count	8/8
SYSTEM I/O Count	13/9
SYSTEM INPUTS	Alarm reset, strobe, program reset, step reset, cycle reset, output reset, start, external servo on, stop, cycle mode, break, low speed, servo off
SYSTEM OUTPUTS	Servo ready, battery alarm, acknowledge, auto/manual mode, system ready, autorun, alarm, cycle end, low speed on
Fieldbus SLAVE options	Available Q4:2020
Extended I/O Options	Internal module, factory installed. Add 21in/17/Out
Communications	Ethernet (TCP/IP, UDP), SD Card
Standard SCOL Functions	SCOL2, torque control (individual axis), gain control (individual axis), interrupt functions, SPURT function, coordinate calculations, payload command, multi-tasking, AREA output function, NCBOY additional axis control, self-diagnostics, pulse output control, conveyor tracking, vision+conveyor tracking.
Optional SCOL Functions	Tbc.
External Control Standard Functions	HOST Protocol