

<b>SPS SERIES</b>	
<b>ITEM</b>	<b>SPECIFICATIONS</b>
<b>Mixing Method</b>	Pseudo-Planetary Motion
<b>Centrifugal Force</b>	Under 50kPa (0.5kgf/cm <sup>2</sup> )
<b>Built-in Timer</b>	Setting from 1 to 99 minutes
<b>Paste Container Sizes</b>	SPS-1/2: Solder Paste 500g : Container Size 100cc Solder Paste 1kg : Container Size 300cc SPS-5: Up to 2kg Cartridge (8" or 12" Length)
<b>Rotation Balance</b>	SPS-1: Auto Balancing SPS-2: Dual Jar SPS-5: Dual Cartridge
<b>Safety Interlocks</b>	Door switch and lock/ Unbalanced motion detector
<b>Power Supply</b>	AC 100 ~ 240 V, 30W, 50/60 Hz
<b>Substantial Power Supply (SPS-1 only)</b>	Alkaline Battery: Size AA Battery X 4 for Auto Balancing
<b>Weight</b>	Approx. 20 kg (SPS-1/2) 40 kg (SPS-5)

<b>PCU-200 SERIES</b>			
<b>ITEM</b>	<b>SPECIFICATIONS</b>		
<b>Model Number</b>	<b>PCU-201</b>	<b>PCU-203</b>	<b>PCU-205</b>
<b>Sample Size</b>	100cc, 300cc Containers (500g, 1500g Solder Paste)		
<b>Sensor</b>	Malcom spiral-pump type		
<b>Measurement Range</b>	5.0Pa•s – 999.9Pa•s (1 Pa•s = 10 Poise)		
<b>Speed Range</b>	1 – 50 RPM		
<b>Shear Rate (sec<sup>-1</sup>)</b>	0.6 X RPM		
<b>Measurement Accuracy</b>	+/- 5% of indicated value		
<b>Speed Accuracy</b>	+/- 2% of set point (controller controlled)		
<b>Repeatability</b>	+/- 0.5%		
<b>Temp. Control Range</b>	15 – 30°C (+/- 5°C of room temperature)		
<b>Recorder Output</b>	Viscosity: 1mV/Pa•s, Temperature: 10mV/°C		
<b>Printer Displays</b>	Temperature, Viscosity, Shear Rate, RPM, Date, Time	Same as PCU-201, Plus JIS Standard	
<b>Automatic Measurement</b>		JIS Standard	JIS plus On-line method
<b>Interface</b>			RS-232C (Vam-2 Software)
<b>Power Requirements</b>	AC 100 ~ 240 V, 50/60 Hz, 70VA		
<b>Options</b>	Ultrasonic Cleaner: AUC-201 Standard Calibration Fluid: Silicon Oil KF96, Type A, 100 & 300cc jars Spare Rotors: Inner and Outer for 100cc and 300cc On-line Software: Control, acquisition and computation of flow characteristics, thixotropic index, recovery ratio, fluid constant.		

<b>PC-1TL</b>			
<b>ITEM</b>	<b>SPECIFICATIONS</b>		
<b>Model</b>	<b>TYPE A</b>	<b>TYPE B</b>	<b>TYPE C</b>
<b>Viscosity Range</b>	100 – 10,000 poise	2.0 – 199 poise	20 – 1999 cp
<b>RPM (N)</b>	3 – 80 RPM FIX: 10 RPM	10 – 80 RPM FIX: 40 RPM	10 – 80 RPM FIX: 40 RPM
<b>Shear Rate D</b>	0.6 x N sec <sup>-1</sup>	1.2 x N sec <sup>-1</sup>	4.8 x N sec <sup>-1</sup>
<b>Measurement Accuracy</b>	+/- 5% of designated value		
<b>Repeatable Accuracy</b>	+/- 2%		
<b>Measuring Temperature</b>	0 – 100°CFS (Resolution 0.1°C Accuracy +/- 0.5%FC)		
<b>Digital Display</b>	Viscosity, Temperature, RPM		
<b>External Output</b>	Viscosity, Temperature		
<b>Calibration</b>	JIS Z8809 Standard Fluid of Viscosity calibration, Silicon KF96		
<b>Power Supply</b>	AC 100 ~ 240 V		
<b>Options</b>	Calibration Fluid: Silicon KF96 100cc or 300cc Spare Cylinder: Outer Cylinder RO-1A,B,C Inner Cylinder RI-1A,B,C		

<b>TK-1</b>	
<b>ITEM</b>	<b>SPECIFICATIONS</b>
<b>Sensor Range</b>	0 – 500 gf
<b>Sensor Resolution</b>	1gf
<b>Measurement Methods</b>	Continuous Preload, JIS Point Preload, IPC Insertion Depth
<b>Parameters Measured</b>	Tackiness: 0 – 500gf Preload: 0 – 500gf Insert depth: 0 – 200 μ meters
<b>Preset Ranges</b>	Preload: 20 – 500 gf Time: 0.1 – 99.9 sec Speed: 0.1 – 10.0 mm/sec 0.2 – 9.9 mm/min Depth: 20 – 200 μ meters
<b>Outputs</b>	Analog: 1 gf/10mV      Digital: RS-232C
<b>Accessories</b>	Hand printer with mask test piece, 5.1-mm dia. probe control and data analysis software (TKW-1)

<b>RCR-30 TRANSMITTING UNIT</b>	
<b>ITEM</b>	<b>SPECIFICATIONS</b>
<b>Measuring Temp. Range</b>	0 – 300°C
<b>Measuring Time</b>	15 min
<b>Sampling Time</b>	0.05 sec
<b>Temp. Accuracy</b>	+/- 2°C
<b>Measuring Points</b>	6 Channels
<b>Input</b>	Thermocouple JIS-K110 Ω max
<b>Transmit Frequency</b>	315 MHz
<b>Transmitting Speed</b>	FSK 9600 8-N-1
<b>Power Supply</b>	Ni-NH battery
<b>RCR-30 RECIEVING UNIT</b>	
<b>ITEM</b>	<b>SPECIFICATIONS</b>
<b>Recharging Time</b>	First time 30 min
<b>Power Supply</b>	AC 100 ~ 240 V

<b>RC-50</b>	
<b>ITEM</b>	<b>SPECIFICATIONS</b>
Temperature	0 – 300°C
Channels	6 Thermocouples
Measurement Time	15 min
Sampling Period	1 sec
Thermo Profile Software	TAM-50
Power Adapter	AC 115 V, 50/60 Hz
Power Source	Ni-Cd Battery

<b>SP-2</b>	
<b>ITEM</b>	<b>SPECIFICATIONS</b>
Sensor Technology	Electro-balance
Sensor Limits	-5.00 gf ~ +10.00 gf
Sensor Accuracy	+/- 0.01 gf for 1 gf range +/- 0.05 gf for 10 gf range
Heater Range	Room temperature ~ 300°C
Heater Atmosphere	Compressed air or N <sub>2</sub> purge
Parameters Displayed	Load, Depth, Temperature
Temperature Profile Settings	Preheat rate: high, med, low Preheat temp: 0 – 300°C Preheat time: 0 – 300 sec Ramp-up speed: 0 – 4.0°C/sec Melting point: 0 – 300°C
Other Presets	Range select: 1 gf or 10 gf Table speed: fast, med, slow
Output	RS-232C
Power	AC 115 V, 50/60 Hz, 700W
Standard Accessories	Manual printer with SUS mask Copper substrates and tubes SMT component adapter Cooling Fan Control and data analysis software (spin-2)
Options	Meniscograph adapter set Microscope Laptop computer

<b>RC-106 MEMORY UNIT</b>	
<b>ITEM</b>	<b>SPECIFICATIONS</b>
Measuring Temp. Range	0 – 300°C
Max Measuring Time	Approx. 60 min
Sampling Time	0.5 sec (default) 0.05, 0.1, 0.2, 0.5, 1.0, 2.0, 4.0, 8.0 sec selectable
Temp. Accuracy	+/- 2°C
Measuring Points	1 – 6 Points
Input	Thermocouple JIS-K110 Ω max
Power Supply	Ni-MH battery 2.4V
Weight	Approx. 1.4kg

<b>RC-106 ADAPTER UNIT &amp; INTERFACE UNIT</b>		
<b>ITEM</b>	<b>SPECIFICATIONS</b>	
Model	Adapter Unit	Interface Unit
Data Output and Input for PC	USB-B or RS-232C	
Data Output and Input for Printer	USB-A	
Power Supply	AC 100 ~ 240 V, 50/60 Hz, 75 VA	
Weight (w/o printer)	Approx. 7.5kg	Approx. 1.3kg

<b>STA-2</b>	
<b>ITEM</b>	<b>SPECIFICATIONS</b>
<b>Analysis Method</b>	Temperature rise thermal analysis
<b>Sampling Amount</b>	Approx. 14g
<b>Pb (Lead) Measurement Range</b>	0 – 0.2% or 0 – 0.5%
<b>Cu (Copper) Measurement Range</b>	0.3 – 0.9%
<b>Measurement Time</b>	Approx. 40 min
<b>Sampling Measurement</b>	170 – 270°C, +/- 1.5% within measurement range
<b>Power Supply</b>	AC 100 ~ 240 V, 200W

<b>TD-3V / VL</b>									
<b>ITEM</b>	<b>SPECIFICATIONS</b>								
<b>Measurement Accuracy</b>	0.0003" (8µm)								
<b>Measurement Range</b>	0.012" (300µm)								
<b>Approval/Rejection Function</b>	Automatically determines if paste meets user-specified standards								
<b>Circuit Board Dimensions</b>	<table border="1"> <thead> <tr> <th><b>TD-3V</b></th> <th><b>TD-3VL</b></th> </tr> </thead> <tbody> <tr> <td>Min: 1.5 x 1.5" (40 x 40mm)</td> <td>Min: 1.5 x 1.5" (40 x 40mm)</td> </tr> <tr> <td>Max: 10 x 13" (250 x 330mm)</td> <td>Max: 16 x 18" (405 x 455mm)</td> </tr> <tr> <td>Thick: 0.02 – 0.079" (0.55 – 2.0mm)</td> <td>Thick: 0.02 – 0.079" (0.55 – 2.0mm)</td> </tr> </tbody> </table>	<b>TD-3V</b>	<b>TD-3VL</b>	Min: 1.5 x 1.5" (40 x 40mm)	Min: 1.5 x 1.5" (40 x 40mm)	Max: 10 x 13" (250 x 330mm)	Max: 16 x 18" (405 x 455mm)	Thick: 0.02 – 0.079" (0.55 – 2.0mm)	Thick: 0.02 – 0.079" (0.55 – 2.0mm)
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Max: 10 x 13" (250 x 330mm)	Max: 16 x 18" (405 x 455mm)								
Thick: 0.02 – 0.079" (0.55 – 2.0mm)	Thick: 0.02 – 0.079" (0.55 – 2.0mm)								
<b>Light Source</b>	TD-3R (red laser, 670 nm)								
<b>Camera</b>	CCD 0.3"								
<b>Measurement Principal</b>	Slit-laser method; laser hits target at 45deg angle								
<b>Laser Classification</b>	Class 2								
<b>XY Tables</b>	Speed: 4.72 in/sec (120 mm/sec) max Repeatable accuracy: 0.0008" (20 µm)								

<b>TD-4M</b>	
<b>ITEM</b>	<b>SPECIFICATIONS</b>
<b>Measurement Range</b>	2 x 3 mm (L x W), 50 – 350 µm (H)
<b>Measurement Resolution</b>	8 µm
<b>Position Correction</b>	According to PC Board fiducial (2 points)
<b>Speed</b>	1 sec or less / visual field (Standard)
<b>Data</b>	Input method: Teaching Number of data fields: 150
<b>Output</b>	Output to printer and in text files
<b>Standard Dimensions</b>	Min: 50 x 50 mm Max: 250 x 330 mm Thick: 0.5 – 2.0 mm
<b>Measurable Range</b>	240 x 320 mm

\* Specifications subject to change without notice.