

DELTA MATRIX



HIGH PERFORMANCE, TRI-TEMPERATURE PICK-AND-PLACE HANDLER



- ▶ High Productivity & Scalability
- ▶ Up to x32 Test Sites
- ▶ Up to 16,000 UPH
- ▶ Chamberless tri-Temperature
- ▶ Active Thermal $\pm 1.0^{\circ}\text{C}$ Accuracy
- ▶ Vision Alignment (x1 to x8 tri-Temperature)
- ▶ Handling of 3 x 3 mm packages

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Specifications

PLATFORM

MEDIA	JEDEC trays (please consult factory for other types)
INPUT & SORTS	7 - Automated tray stacks 3 - Manual trays in pullout drawer
TEST SITE	x1 to x32 Pitch – x: 32 mm up to 80 mm Pitch – y: 32 mm up to 80 mm Horizontal docking Plunge force up to 181 kgf
VISION ALIGNMENT	Up to x8 (optional) Location Accuracy: $\pm 40 \mu\text{m}$ Rotation Accuracy: $\pm 0.2^\circ$
INDEX TIME	x1 to x4: 550 msec x8: 630 msec x16: 800 msec
THROUGHPUT	Up to 10,000 uph (standard) Up to 16,000 uph (optional)
JAM RATE	1 in 10,000 units (ambient-hot) 1 in 5,000 units (cold)
PRODUCTIVITY	Auto Contactor Cleaning (optional) Auto Restest Continuous Load/Unload
TEMPERATURE RANGE	Ambient to +155°C (standard) -55°C to +155°C (optional) +175°C (optional)
THERMAL	Chamberless tri-Temperature test site Active thermal control per site $\pm 2.0^\circ\text{C}$ accuracy $\pm 1.0^\circ\text{C}$ after kit-specific calibration $\pm 0.5^\circ\text{C}$ per site temp stability Soak capacity 3 trays (standard) Soak capacity 5.5 trays (optional)

INTERFACE	Loadboard compatibility (X&Y pitch) Docking height 990 to 1,178 mm Parallel, RS 232, GPIB and P849
ESD CONTROL	Decay: 5 sec Balance: 35 V
USER INTERFACE	Windows-based color touchscreen
POWER REQUIREMENTS	200-240VAC, 50/60Hz, Three Phase, 30 A
OPTIONS	All options are field-upgradeable

KITS

DEVICE TYPE	QFP, TQFP, TSOP, SOIC, CSP, BGA, QFN, WLCSP and others
PACKAGE SIZE	Minimum: 3 mm x 3 mm Maximum: 51 mm x 51mm
PACKAGE CHANGEOVER	<10 minutes typical
CONTACTORS	Delta Design high-performance contactors or customer-specified contactors

Specifications subject to change without notice.
For detailed performance specifications, please contact Delta Design.



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