

COLLIE 302HC



Product Features:

1. **True Tri-Temperature Capability**
 - Supports -55°C to $+155^{\circ}\text{C}$ with $\pm 1^{\circ}\text{C}$ accuracy, enabled by a two-stage refrigerant chiller.
2. **High ATC Heat Dissipation Performance**
 - Handles up to 1550W @ 125°C , ideal for power-intensive IC testing.
3. **Multi-Zone Active Temperature Control**
 - Independent control at pre-heat plate, shuttle, and test head for precise thermal stability.
4. **Compact Dual-Site Tri-Temp Platform**
 - Single/Dual-site design with high thermal performance in a relatively compact footprint.
5. **Reliable Production Operation**
 - Jam rate $< 1/1000$, JEDEC tray handling, 16 software bins, and both auto/manual operation modes.



Basic Specifications	
Model	Collie 302HC
Test Mode	FT
Device Type	QFN, QFP, BGA, LGA, PLCC, PGA, CSP, TSOP, etc.
Device Dimensions	2 × 2 mm to 80 × 80 mm (T < 10 mm)
Test Sites	Single Site / Dual Site
UPH	920 (Ambient) 680 (Hot & Cold) Socket time: 120 sec (based on QFN 2×2, Tray 14×35)
Jam Rate	< 1/1000
Tray Type	JEDEC
Tray Loader / Unloader	Loader ×1, Auto ×1, 16 software bins
Number of Sort Bins	16 (software bins)
Test Interface	RS232 / GPIB
Test Area Size	180 mm × 220 mm
Test Site Opening	1015 (W) × 1080 (D) × 1020 (H) mm
Socket Height	1020 mm
Rotator	$\pm 90^{\circ}$, 180°
Contact Force	240 kgf
Operation Mode	Auto / Manual
Cooling Method	Two-stage refrigerant chiller
Temperature Range	-55°C to $+155^{\circ}\text{C}$ ($\pm 3^{\circ}\text{C}$)
Temperature Accuracy	$\pm 1^{\circ}\text{C}$
Temperature Control Zones	Pre-heat/Cooling plate + Pre-heat/Cooling shuttle + Test head heating/cooling
Pre-heat/Cooling Plate Area	90 mm × 180 mm
Heating / Cooling Rate	$+25^{\circ}\text{C} \rightarrow +155^{\circ}\text{C}$: 20 min $+25^{\circ}\text{C} \rightarrow -55^{\circ}\text{C}$: 20 min

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ATC Capability	-55 °C @ 250 W 25 °C @ 1050 W 125 °C @ 1550 W heat dissipation (Based on IC size 65 × 65 mm)
Dimensions / Weight	Hndler: 1550 (W) × 1600 (D) × 2150 (H) mm / ~500 kg Chiller: 650 (W) × 1300 (D) × 1000 (H) mm / ~350 kg
Facility Power Requirement	Handler: Single-phase 220 V, 50/60 Hz, 32 A Chiller: Single-phase 220 V, 50/60 Hz, 32 A ×2
Facility Air Requirement	0.5~0.7 MPa, 800 L/min Inlet dew point: -10 to 10 °C Oil content ≤ 0.1 ppm

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