# **Electrovert**

**Electronic Assembly Equipment** 

# OmniMax & OmniES™

# **Reflow Soldering and Curing Systems**



The OmniES/Max series
ovens are designed to
deliver maximum thermal
performance combined
with process capability and
control. The OmniES/Max
product portfolio offers the
most advanced technology
in the industry.

### **IsoThermal™ Chamber Technology**

The OmniES and OmniMax reflow systems series are designed to deliver maximum thermal performance combined with process capability and control. The heartbeat of the OmniES/Max series — Electrovert's patented IsoThermal Chamber Technology (ICT). IsoThermal Chamber Technology innovative design consists of dual compression boxes, independent blower speed control, super efficient heating elements, and utilizes a low-turbulent convection delivery type diffusers. The result: super-efficient thermal performance throughout the entire process.

### OmniES 5, 7, 10, and 13 Zone Reflow Soldering and Curing

The OmniES offers a combination of innovation and industry-proven technologies in an easy-to-use, reliable oven for reflow soldering and curing applications. The OmniES includes independent blower control as standard. The OmniES series are available in hybrid or full convection models (full convection is field upgradeable). Through energy saving designs, the OmniES models are ideal for the majority of reflow applications. The OmniES delivers excellent thermal performance at the lowest cost of ownership.

### OmniMax 7, 10, and 13 Zone Reflow Soldering

The OmniMax offers precision IsoThermal convection for demanding thermal profile requirements and is ideal for applications that require precise control of convection dynamics within each zone. The OmniMax has independent speed and temperature control between top and bottom within each individual zone as standard.

## **Innovative Cooling Technology**

- Air flow dynamics within cooling zones are efficiently controlled for a balanced environment and reduced exhaust temperatures
- An industry first with dripless cooling significantly reduces the potential for flux dripping in the cooling area
- · Excellent separation between the heating and cooling areas produces tight control of TAL
- Enhanced nitrogen cooling design achieves maximum airflow balance and reduces nitrogen consumption by 20 to 25%



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#### **Maintenance Reduction Technologies**

- Patented dripless cooling design extends maintenance in the cooling section and easy to clean
- Intelligent Flux Control (IFC) advanced flux management system that incorporates self-clean features and allows for full maintenance during production
- Full accesibility to all major addemblies is accomplished through removable panels (front and back)



#### **Versatile Conveyor System**

- The versatile conveyor system is capable of process widths up to a WIDE 1.06 m (42") for individual products or multiple products on multiple lanes in a single chamber oven.
- Linear guides and precision screw shafts ensure a smooth motion and highly repeatable conveyor width
- Robust conveyor design that is focused on minimizing vibration
- Center Board Support (CBS) option
- Dual Lane solutions are compatible with all major pick-and-place suppliers



- User-friendly Windows®-based user interface with expanded data logging capabilities
- Common PC and I/O system with wave and cleaner products
- Independent closed-loop blower control (heating and cooling)
- OmniCheck<sup>™</sup> continuous monitoring and verification feature
- Comprehensive list of features that support demanding production requirements.





	OmniES/Max Series Reflow and Curing				
Specifications	5 Zone	7 Zone	10 Zone	13 Zone	
OmniES	✓	✓	✓	✓	
OmniMax	_	✓	✓	✓	
OmniES Convection Type	Hybrid and Full				
OmniMax Convection Type	_		Precision		
Standard Process Width	508 mm (20") standard; 457 mm (18") standard on OmniES Full Convection				
WIDE Process Width	_	_	_	• Mesh belt type: 1.06 m (42") • Dual lane pin type: 500 mm (19.7") • 6 lane pin type: 145 mm (5.75")	
Machine Length	3421 mm (134.7")	4863 mm (191.5")		6439 mm (253.5")	
Machine Width	1367 mm (53.8")				
Machine Height	1241 mm (48.9")				
Heated Length	1921 mm (75.6")	2685 mm (105.7")	AV MA	3855 mm (151.8")	
Cooling Length	481 mm (18.9")	887 mm (34.9")		1293 mm (50.9")	
Reflow Operating Temperature	350°C (662°F)				
Curing Operating Temperature	As low as 60°C (140°F)				
UL Certified and Listed for Factory Automation	Standard				
CE Listed	Optional				
Country of Origin	Made in USA				

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ITW EAE is a division of Illinois Tool Works, Inc. It is a consolidation of all of its Electronic Assembly Equipment and Thermal Processing Technology. The group includes world-class products from MPM, Camalot, Electrovert (Speedline), Vitronics Soltec and Despatch.

