AMADA

Premium MG3 Hot Bar
Monitoring System

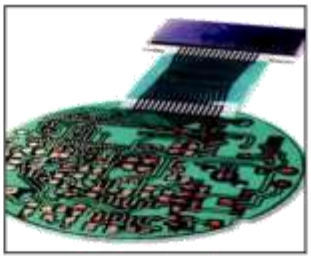
The process monitoring device MG3 Hot Bar offers full process and quality control during production.

Provides all relevant measurement information such as force, temperature, time and displacement increase transparency and allow for continuous control throughout the entire process cycle. Compact and flexible system delivers high quality Hot Bar connections. Ideal price-performance ratio, high throughput, easily adjustable frame construction. Designed for multiple technologies like Heat-Seal bonding, Hot Bar Reflow Soldering, Heat Staking. Interacts with reliable process control, by proven technology of Uniflow Power Supply.

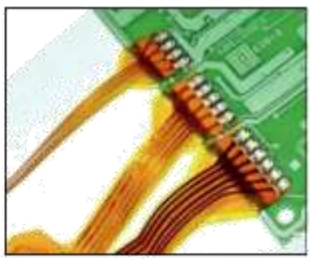
KEY FEATURES

- Premium Hot Bar Monitor designed to control Hot Bar Bonding processes reliably, efficiently and conveniently
- Dual channel capability offers simultaneous monitoring
- Configurable graphic user interface with 4 display quadrants, graphic and numeric indicators as well as intuitive online help gives maximum transparency for all relevant parameters
- Full on-screen SPC capability generates real time monitoring
- Up to 99 available schedules provides max. control with password protection
- Modern interface infrastructure with RS232 or Ethernet TCP/IP
- Bond interrupt functions enable the operator to steer the bond process
- Convenient and safe data storage and data transfer with USB port

TYPICAL APPLICATIONS

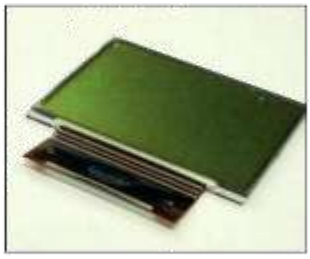


Heat-Seal Bonding



Hot Bar Reflow Soldering

Heat Staking



ACF Bonding

PRODUCT OVERVIEW MG3 HOT BAR

The Monitor Device MG3 Hot Bar-W2 can monitor temperature, force and pressure and calculates its derived parameters with dual channel capabilities. It has the option to buy two measuring sensors and then monitors displacement, temperature and force.

	Hot Bar-W2
Thermode cycle	K and J
Configuration	Thermode cycle K and J parallel with external BCD program selection, turn pressure knob for menu selection and parameter input, analog inputs force & pressure, optional: 2 displacement measuring sensors digital with 1 µm resolution
Measuring functions	Temperature and time pre-warning and limit values, envelope waveform function, counter, statistic process control (detected values unreadable as limit values),
Options	Displacement, advanced settings, parts detection, speed, pressure and force, 2 sensors
Supply voltage	90 – 260 V AC
Main frequency	50 - 60 Hz
Connected rating	60 W
Fusing	Internal 2 A delayed
Connecting cable	3 x 0,75 mm², 2 m long
Protection class	IP30
Graphic display	120 x 90 mm
Graphic scan	10 points/ms
Storage	USB Port
Temp and force	25 degrees Celsius up to 600 degrees Celsius, 8 to 2500 N
Monitoring programs	99
Measuring times	0 to 60 seconds
Scan-rate	100 ms per channel
Analogue input	Temperature, Force and Displacement
Digital input	15-p. D-SUB male connector, BCD; 5-p, D-SUB male connector
Digital output	15-p. D-SUB male connector, BCD; 25-p, D-SUB male connector
Digital interface	Digital I/O, RS232, Ethernet TCP/IP and USB port are standard CANOpen, Profibus or Ethernet/IP are optional features
Serial interface RS232	Output of measuring values in ASCII compatible printer format
Environment temperature	0 – 40 °C
Force measuring range	8 to 2500 N (depending on bond head)
Displacement measuring range / accuracy	0 – 12,5 mm/ +/- 2 µm with sensor 1 µm
Displacement measured value Resolution	According to sensor type 1 to 0.1 µm digital
Weight approx.	5,4 kg
Dimensions (L x H x D)	240 x 135 x 320 mm
Certification	CE

KEY FEATURES HOT BAR MODULES

The MIYACHI EAPRO Hot Bar Modules are an integrated part of the Hot Bar product line and available for all standard and customized Hot Bar systems as well as for module integration through system integrators. The Uniflow-4 Pulsed Heat temperature controller and MIYACHI EAPRO Bond Heads can be used in combination with the MG3 Hot Bar to control and verify Hot Bar processes.