

# MH-3300

## High-Speed Laser Mark Handler



Automotive



Mobility



IoT/IoV & Optoelectronics



Computing & Network



Industrial & Medical



Consumer

### Productivity

- Uses lasers from Coherent, Keyence, Alltec, Keteca, and other intelligent lasers that can mark at least 1,000 characters/sec
- High throughput from end of mark to next start mark with index time of <1.75 sec and mark time  $\geq 4.0$  sec
- Virtually jam-free operation with a <1 jam in 1,000 strips run
- Innovative data management software that can be integrated into customer's MES/MIS<sup>(1)</sup>

### Flexibility

- Quick kit changeover from one lead-frame type to another in <30 minutes
- Software recipe selection to setup for specific device type or mark instructions
- Modular and scalable for future expansion - allows a customer to buy only what is needed

- Stacked or Slotted I/O
- Supports a variety of package types
- Post-mark inspection options
- Support a variety of intelligent integrated lasers with a small footprint

(1) Manufacturing Execution System/Manufacturing Information System

# MH-3300

## High-Speed Laser Mark Handler

### Specifications

#### Platform

##### Performance Characteristics

- Strip-to-Strip Index time:  $\leq 1.7s$  with mark time  $\geq 4.0s$  (Stacked).  $\leq 1.7s$  with mark time  $\geq 10.0s$  (Slotted)
- Accuracy for Mark: Standard +/- 50 microns
- Package changeover: < 15 minutes
- 2D Read: Topside, bottom side - SEMI T9-0200
- Jam rate: <1: 1,000 strips run
- Uptime >97%
- MTBF: >200 hours
- MTTR: <20 mins
- MTBA: >4 hours
- ESD: <100 V within 75 mm of device path (standard)
- Change over < 15 minutes

#### 2D, Barcode Read

- Topside, bottom side - SEMI T9-0200

#### ESD Compliant

- <30 V within 75 mm of device path with optional ionizer

#### Stacked I/O

- Magazine width: 28 - 100 mm
- Magazine length: 110 - 310 mm
- Magazine height: 200 - 450 mm
- Number: 2 input, 2 outputs

#### Strip Requirements

- Package types: Lead frames, laminates
- Strip length: 50 - 300 mm
- Strip width: 23 - 100 mm
- Lead frame thickness: 100 - 1300 microns
- Unit body thickness: 800 - 5000 microns
- Strip warp allows:  $\leq 3$  mm

#### Package Requirements

- Types supported: Leaded, leadless, LGA, BGA in strip format

#### Laser

- Supported: RoFin, Trumpf, Keyence, Alltec, Keteca (other integrated upon request)
- Typical Mark Times per Strip
  - 2D: 0.5 to 1.0 sec
  - Final Mark: 3.0 to 12 sec
  - Note - mark times are application and laser dependent
- Communication SECs II

#### Facilities Requirements

- Electrical: 208-220V single phase, 50-60 Hz, 20 Amps
- Compressed Air: Clean Dry Air, 5-7 bar (70-100 psi)

#### Physical Dimensions

- Size: 1.7 m (L) x 1.3 m (W) x 1.6 m (H)
- Weight: < 750 Kg
- Mobility: Transportable

#### Electrical Interfaces

- Factory Network: Ethernet (TCP/IP, Microsoft)
- Software Interface: SECS/GEM compliant
- Strip Mapping: SECS/GEM and XML, Semi G84 & G85 & E142

#### Options to the Base System

- Brushing: Pre and Post Mark
- Ground Fault Monitoring
- ESD Ionizers
- 2DID Verification: Pre and Post Mark
- Mark Offset: Post Mark Inspection
- Embedded or External Cell Controller
- SmartTrack Support

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