# **EAGLE 3D 8800 Compact**

3D Automated Optical Inspection system





# **EAGLE 3D 8800 Compact**

# **Technology and Features**

# **Advanced High Speed Inspection and Measurement Technology**

#### **Shadowless Phase Measuring Profilometry**

EAGLES 9MP 8 Projector 3D AOI inspects 100% of the PCB in 2D and 3D. Provide a complete optical inspection of a PCB shadow free and low false calls maintaining a high flexibility in system functionality.

#### Moiré Technology



Over 10 years of integrating Phase Measuring Profilometry Technology into our TROI Solder Paste Inspection Systems has proven the most advanced 3D technology available.

- 8 Projection + Three stage lighting
- 2D and 3D simultaneous inspection algorithms
- Telecentric Lens offers higher accuracy and detection
- High Speed CPU and Image Processing
- User Friendly Graphical Interface
- Built in Library Management System
- · Offline Real Time Debug Station (Optional)

#### **High Speed Inspection Technology**

EAGLES High Speed Option inspects in 40.5cm sq. per sec. by utilizing an advanced network of more robust CPU, controller boards and our proprietary developed 9MP 15um 150fps camera with telecentric lens.



# **High Component Inspection Technology**

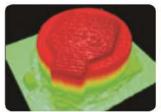
EAGLES optional new 10-Way Projection Technology offers an industry first 27mm component height inspection in 100% 3D.





# **Shadow Free 3D Technology**

Eliminates shadow issues on highly populated PCBs and tall components

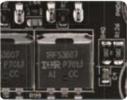




# **Optical Character Recognition**

Recognizes component part characteers by using color and pattern algorithms. Ability to add & modify OCR font to optimize inspection condition.



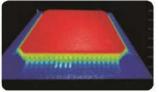




# 3D Lead Inspection

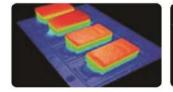
3D measurement algorithms enable the EAGLE to measure lead height and volume of solder proving full-high quality 3D images.

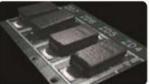


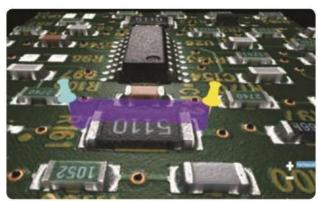


# 3D Solder & Height Measurement

Using our advanced 3D technology, the EAGLE is able to take inspection to levels that are limited by conventional 2D systems. Adding solder height, volume and part co-planarity inspection provides enhanced defect detection capabilities.

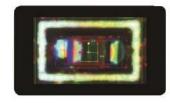






## 2D RGB Algorithms

Through the RGB distinguish, operator can easily confirm the failures such as cold joint and lift lead.





# Ease of programming (Auto Teach Function)

Advanced 3D imaging technology allows us to measure and recognize the geometric shapes of PCB components and automatically link them to our built in parts library.

























# **EAGLE 3D 8800 Compact**

#### SPECIFICATIONS

| Configuration Compact Standard Version |                                                                            |                            | Compact Pro Version                    |                         |
|----------------------------------------|----------------------------------------------------------------------------|----------------------------|----------------------------------------|-------------------------|
| Camera                                 | 10MP                                                                       |                            |                                        | 12MP                    |
| X/Y Pixel Resolution                   | 10um                                                                       | 15um                       | 18um                                   | 15um                    |
| Inpsection Speed                       | 19.8 cm²/Sec                                                               | 44.55 cm <sup>2</sup> /Sec | 64.15 cm <sup>2</sup> /Sec             | 52.65 cm²/Sec           |
| FOV (Field Of View)                    | 33X30 mm                                                                   | 49.5X45 mm                 | 59.4X54 mm                             | 45X60 mm                |
| Model                                  | EAGLE 3D 8800HS CPT                                                        |                            | EAGLE 3D 8800HSL CPT                   |                         |
| Max. PCB Size                          | 330*250mm                                                                  |                            | 510*460mm                              |                         |
| Min. PCB Size                          | 50*50mm                                                                    |                            |                                        |                         |
| Dimension / Weight                     | 920X1085X1500mm / About 680kg                                              |                            | 1080X1290X1500 mm / About 790kg        |                         |
| Electrical Requirements                | 220 ~ 240 Vac , 1 Phase, 50/60Hz                                           |                            |                                        |                         |
| Power Consumption                      | 3.5KW(16.0A Max                                                            | )                          |                                        | 1085 (UP 0000R)         |
| Thickness                              | 0.4 ~ 7.0 mm                                                               |                            |                                        |                         |
| Top Clearance                          | 50 mm                                                                      |                            |                                        | LI√ · ·                 |
| Bottom Clearance                       | 50 mm                                                                      |                            | - EINE SO                              |                         |
| Height Range                           | 0 ~ 5.5 mm (Option 27 mm)                                                  |                            |                                        | 1                       |
| Height Accuacy                         | +/-5%                                                                      |                            | idid.                                  | . 0                     |
| Max PCB Warpage                        | +/- 3 mm                                                                   |                            | A E                                    | AG DA.                  |
| Motor Type                             | SERVO MOTOR + BALL SCREW                                                   |                            | 840<br>860 (CONVEYOR)                  | 1076                    |
| Conveyor Type                          | 1 Stage Standard                                                           |                            | 3 Stage and Extension Rail Not Support |                         |
| Control Unit                           | PC (17-7700, 1TB+500G, 16G memory)/Monitor (24 inches)                     |                            |                                        |                         |
|                                        | Offline Editor     Inline Debugging                                        |                            | <ul> <li>Rework Station</li> </ul>     | • i-Monitor SPC Station |
| Option                                 | • 3D Target (KTL) • 2D Glass Board JIG • i-PEMTRON Closed Loop • Shopfloor |                            |                                        |                         |

<sup>\*</sup> Specifications Subject To Change Without Notice

NG Buffer



NG Conveyor



#### PEMTRON CORPORATION

#1406, (Byuksan Digital Valley VI, Gasan-Dong) 219, Gasan digital 1-ro, Geumcheon-gu, Seoul, korea. 08501 Tel: +82 2 2160 5000 Fax: +82 2 2627 3770

kevin@pemtron.com

## PEMTRON EUROPE GMBH

Kronstadterstrasse 4, 81677 Munich / Germany Tel:+86 138 2881 1057 Tel: +49 89 20 80 26 96 5 spark@pemtron.com mvielsack@pemtron.com

## PEMTRON TECHNOLOGIES ASIA PTE LIMITED

Flat/Rm 1003, 10F Office Twr Hutchson Logistics Ctr 18 Container Port Rd South, Kwai Chung, HK Tel: +852 3665 6245 kevin@pemtron.com

#### PEMTRON(ShenZhen) TECHNOLOGY Co.,Ltd

RM 508, A2 Build, Pei Hong Industry Park, No.1 Ke Hui Road. Middle Zone, High-New Science & Tel: +52 333 157 0636 Technology Park, Nanshan District, Shenzhen.

tao@pemtron.com

## PEMTRON TECHNOLOGY, CORP

3450 Wilshire Blvd., Ste 108-73 LosAngeles, CA 900100-2208 Tel: +1 800 850 8764(TROI) steve.wong@pemtron.com

#### PEMTRON MEXICO

Bottom Side Barcode

Av. Mariano Otero 1917 Local A-5, Residencial Victoria, Guadalajara, Jalisco, Mexico C.P. 44560 jaime.arreola@pemtron.com

#### PEMTRON VIETNAM

No.LK1-N11, Splendora, Urban Area, Km 9+700 Thang Long Avenue, Hoai Duc District, Hanoi, Vietnam 100000 Tel:+82-2-2160-5011(Internet Phone)

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