VisionPro Merlin
Benchtop AOI System

The VisionPro Merlin sets the standard for the most valued packed AOI solution on the market today.

Based upon many years of experience in the electronics manufacturing sector, the Prey Merlin and Falcon range of AOI systems are designed to offer customers what they want and need while keeping costs down and implementation simple.

The Merlin offers a price competitive solution that makes full inspection capabilities accessible at almost every budget without sacrificing functionality and ease of use. Our systems have been optimised for remote support to enable us to get our customers answers fast meaning their manufacturing process can have maximum up time.

Our bench-top inspection system, the Merlin, offers all the capabilities of machines more than twice the cost. Using a 5MP camera, the system gives the ability to inspect almost any component. A robust yet flexible universal carrier system give the user the flexibility to quickly insert a PCB up to 510mm x 408mm, clamp it and inspect with the press of a single button, once complete the PCB is returned to the load point ready for the next PCB to be loaded.

The Merlin includes full 1D and 2D bar code reading as standard to offer a fully traceable solution that can be combined with the user friendly Prey rework suite. Laser and 3D SPI Sensor options for added measurement capabilities. The Merlin combines excellent mechanical stability with the latest in 64bit software and Windows 10/11 OS to give one of the most truly unique inspection solutions found anywhere in today's global market.

Prey combines all its systems with our tried and tested rework and trace-ability solutions to give any user a complete picture of their manufacturing process.

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Technical Data: MERLIN

Camera	Top 5M Pixels Camera - 12M Pixel (Optional)
Camera Resolution	Standard : 15um, Optional 10um
Lighting	4 Colour Lighting Ring (RGBW) UV (Optional)
X / Y Movement	AC Servo Motor Ball Screw and Linear Rail
PC Configuration	P4 Intel Dual Core 2.5GHz CPU, 8G DDR3 Memory, 1TB HDD and CD-Rom
Power Supply	1P, 220V, 50/60Hz, 10A
Machine Dimensions	Length: 1,100mm x Depth: 1,300mm x Height: 940mm
Machine Weight	410Kg
Operating System	Windows 10/11
Programming	CAD File Loading, Manual Teaching
Statistic Data Function	SPC Software
Minimum PCB Size	50mm x 50mm
Maximum PCB Size	510mm x 408mm
Maximum PCB Thickness	<6.0mm
Clearance	Top / Bottom: 40/50mm
Clamping Edge	>3.0mm
Component Inspection Tests	Missing, Reversed, Shift, Damaged, Skew, Tombstone
Solder Inspection Tests	No Solder, Insufficient/Extra Solder, Bridge
Smallest Component Inspection	Chip: 0201 (15um Lens), Chip: 01005 (10um Lens)
Barcode Reader	1D or 2D Barcode Reading Via Camera

<u>New for 2024.</u>

1. New RGBW lighting unit provides uniform lighting over an increased field of view and improves detection of shallower joints.

2. Optional 12 Megapixel camera to allow either increased optical resolution or a larger field of view at the current resolution to increase inspection speed (available Spring 2024, will be fully retrofitable).

3. The Merlin is a fully CE Certified system offering unmatched value and reliability on a Windows 10/11 coded software interface giving the user many years of use backed by a full engineering and software ASC- Detech development team.

4. Laser Option for component and lead height measurements.

5. 3D SPI Sensor Option for Dual Technology capability.

These are just some of the additional developments that make up part of the Prey Inspector range, please email or call the ASC International team to arrange a video meeting or technical demonstration.