



Ersa MOBILE SCOPE – camera units with lenses, desktop holder and focusing stand

- Unique Technology Advantages:**
- Modular system for flexible use
 - High-resolution USB camera
 - Exchangeable high-quality lenses
 - Stand with fine adjustment
 - Completely ESD safe
 - ImageDoc Basic software package

Ersa MOBILE SCOPE – solder joint inspection in the twinkling of an eye

The Ersa MOBILE SCOPE is a compact and handy, portable video microscope to inspect solder joints in electronic production environments. The device has been designed for optical inspection and digital image recording including measurements of solder joints on Ball Grid Array (BGA), μ BGA, CSP and Flip-Chip packages. The Ersa MOBILE SCOPE is suitable to inspect PCB lands, solder paste prints or in general for the optical inspection of components on printed circuit boards in Surface Mount Technology (SMT) or in Trough Hole Technology (THT). The device can be used in quality control, production, laboratories or R&D departments.

The compact Ersa MOBILE SCOPE connects with a PC or any portable computer via an USB interface and is ready for operation within minutes in any location. By means of the high-quality BGA optical head, components with hidden

solder joints can easily be inspected, a Macro-Zoom lens allows topview surface inspection in various magnifications. Both optical heads are plugged onto the high-resolution digital colour camera hand piece with a „Quick Snap“ connection. Changing the optical heads in accordance to the inspection task is a matter of seconds.

Long-life and very bright controllable LED lights are integrated in both optical heads and provide optimal illumination of the solder joints. In BGA inspection an additional LED brush light is essential for backlight illumination or to light up very hidden and hard to reach areas. Soldering errors can be detected quickly and easily with the Ersa MOBILE SCOPE. The included and established ImageDoc inspection software not only displays the live images but also offers the operator various possibilities for documentation and analyzation of the inspection results.

Extensive accessories allow the operator to compose his individual Ersa MOBILE SCOPE inspection system according to his needs.

The practical aluminium case for the Ersa MOBILE SCOPE offers safe storage of the inspection items and transportation of the system to any location wherever it is needed.



Inspection of a micro-BGA



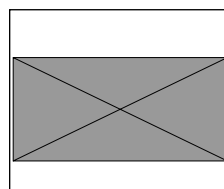
Desktop holder for Ersa MOBILE SCOPE



Focusing stand (0VSS065) with Ersa MOBILE SCOPE



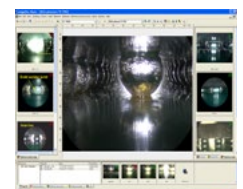
Focusing stand (0VSS060) & LED brush light stand



X-Y table



Foot switch for triggering image



ImageDoc (inspection software)



Mobile optical inspection system

Technical data Ersa MOBILE SCOPE

| Basic camera unit | | Description |
|--|--------------------------------|--|
|  <p>0VSCA060</p> | Image sensor | 1/3.2" N-MOS solid state color image sensor |
| | Number of effective pixels | 2592 (H) x 12944 (V) pixels (5.0 MP) |
| | Interface | USB 2.0 serial bus |
| | Dimensions | 114 (L) x 36 (W) x 51 (H) mm (without cable) |
| BGA Lens, 90° Optical Head | | Description |
|  <p>0VSSE060-90K</p> | On screen magnification | ~ 180x – 15x on 14" monitor |
| | Working distance range | ~ 0.5 – 30 mm (focusing range) |
| | Field of view | ~ 2.0 – 24 mm |
| | Illumination | Integrated long-life cool white LED illumination |
| | Size of the optical head tip | 8.2 x 2.2 mm (W x D) |
| | Foot print of optical head tip | 8.2 x 0.8 mm (W x D) |
| | Dimensions | 83 (L) x 20 (Ø) mm (max. 83 x 30 mm incl. focus position adjustment pin) |
| Macro-Zoom 80x with built-in LED light | | Description |
|  <p>0VSSE060-MZ80</p> | On screen magnification | ~ 80x – 8x on 14" monitor |
| | Working distance range | ~ 5 – 200 mm |
| | Field of view | ~ 5 – 45 mm |
| | Illumination | Integrated long-life cool white LED illumination |
| | Dimensions | 43 (L) x 19 (Ø) mm (85 x 35 mm max. incl. telescopic stabilizer). |
| LED brush light | | Description |
|  <p>0VSLS030</p> | Lamp type | Cool white power LED |
| | Illumination output | 64 x 0.250 mm (Ø) plastic optical grade fibres |
| | Power source | 3 x AA size batteries (Alkaline is recommended) |
| | Dimensions | Ø 26 x 250 mm (max. 40 x 250 mm) |

Ersa MOBILE SCOPE sale sets

| Content | Order number | 0VSSC060VK1 | 0VSSC060VK2 | 0VSSC060VK3 |
|--------------------------------------|--------------|-------------|-------------|-------------|
| Basic camera unit, digital | | 1x | 1x | 1x |
| BGA lens, 90° optical head | | 1x | -- | 1x |
| Macro-Zoom 80x with LED light | | -- | 1x | 1x |
| LED brush light with dimmer | | 1x | -- | 1x |
| Desktop holder for camera unit | | 1x | -- | 1x |
| Operating manual | | 1x | 1x | 1x |
| ImageDoc Basic (inspection software) | | 1x | 1x | 1x |
| Aluminium case for Ersa MOBILE SCOPE | | -- | -- | 1x |

Accessory Ersa MOBILE SCOPE

| Product name | Order number |
|--|-------------------|
| Focusing stand, coarse/fine movement | 0VSST060 |
| Focusing stand – Recommended for BGA inspection! | 0VSST065 |
| X-Y table | 0VSXY060 |
| Stand for LED brush light | 0VSLS030H |
| Foot switch for triggering image - with USB connection | 0VSCA060FS |
| Ersa lens cleaning kit | 0VSLC100 |
| Aluminium case for Ersa MOBILE SCOPE | 3VP00703 |