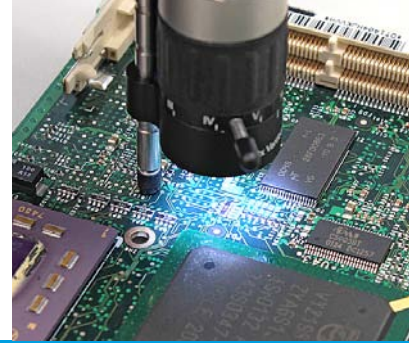# DATA

ERSA mobile scope

Mobile optical Inspection System for electronics production

ERSA mobile scope – Camera units with lenses and Desk-top holder

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), µBGA, CSP and Flip-Chip packages. The ERSA mobile scope is suitable to inspect PCB lands, solder paste prints or in general for 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 is connected to 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 inspected, a Macro-Zoom lens allows topview surface inspection in various magnifications. Both optical heads are plugged onto the high-resolution digital color 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. For BGA inspection

an additional LED brush light is essential for backlight illumination or to light up very hidden and hard to reach areas. With the ERSA mobile scope soldering errors can be detected quickly and easily. 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 he ERSA mobile scope offers save storage of the inspection items and transportation of the system to any location wherever it is needed.

Inspection of a micro-BGA

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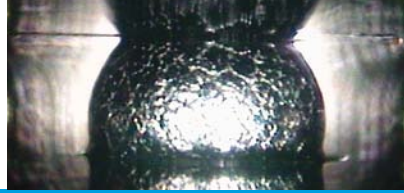Tel.: 00 33 3 80 56 66 10
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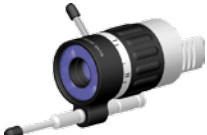Tel.: +86 (21) 3126 0818
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Technical data ERSA mobile scope

Basic camera unit	Description
Image sensor	1/3.2" N-MOS solid state colour image sensor
Number of effective pixels	1600 (H) x 1200 (V) pixels (UXGA / 2.0 MP)
Interface	USB 2.0 serial bus
Dimensions	114 (L) x 36 (W) x 51 (H) mm (without cable)

0VSCA060

BGA Lens, 90° Optical Head	Description
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)

0VSSE060-90K

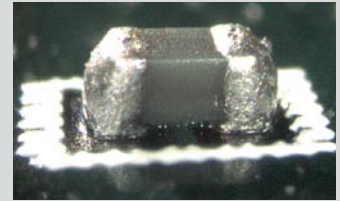| Macro-Zoom 80x with built-in LED light	Description
On screen magnification	~ 80x – 8x on 14" monitor
Working distance range	~ 5 – 200 mm
Field of view	~ 5 – 45 mm
Illumination	Integrated long-life cool white LED illumination
Dimensions	43 (L) x 19 (Ø) mm (85 x 35 mm max incl. telescopic stabilizer).

0VSSE060-MZ80

LED brush light	Description
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)

0VSLS030

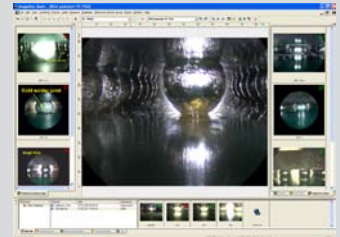## ERSA mobile scope sale sets

Order number → / Content ↓	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
X-Y table	0VSXY060
Stand for LED brush light	0VSLS030H
USB image capture foot-switch "F3"	0VSSC060FS
ERSA lens cleaning kit	0VSLC100
Aluminium case for ERSA mobile scope	3VP00703

High magnification inspection of 0201s

ImageDoc (Inspection software)

Desktop holder for ERSA mobile scope

Focusing & LED brush light stand

X-Y table

USB image capture foot-switch

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