



Technical Highlights

- High resolution, 90° BGA optical lens ($\leq 300 \mu\text{m}$)
- Light management with flexible arm and optional fiber optic light brush & fan; mechanical iris adapter
- Flexible & ESD safe stand and table allows for a total of 7 axes of movement of optics and PCB
- ImageDoc Basic software with large database of problems and solutions
- Best performance/price ratio!

The patented ERSASCOPE 1 – the world's first BGA optical inspection system is now available at a lower cost.

For almost a decade, over 3,000 users worldwide are benefiting from the ability to inspect hidden solder joints. Whether for inspection under BGAs, PLCCs or for inspection where other microscopes cannot see, ERSASCOPE technology offers a significant added value to any Quality Assurance program. Industry experts continue to promote the need to inspect hidden joints with ERSASCOPE technology!

The ERSASCOPE 1 is a newly designed unit offering the award winning ERSASCOPE inspection capability at the lowest price possible. The core component of the system, the ERSASCOPE optic, is the original, patented optical ERSASCOPE.

A new WVGA USB 2.0 camera uses CMOS technology offering optimal light sensitivity and resolution. The halogen light source supplies optimal light to both the ERSASCOPE 1 optic as well as the flexible gooseneck lighting which is included standard with the system.

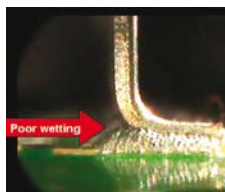
The multifunctional ERSASCOPE inspection stand includes Z-axis course and fine adjustment of the scope and offers a total of 7 axes of movement for the scope. It is thus possible to view an object at almost any angle!

The X-Y PCB table has two movement wheels for course and fine movement of the PCB during inspection.

The user friendly ImageDoc Basic software package is included standard with the system. This software offers the following features: Live Image/Still picture; Reference Picture Groups/ Image Database; Limited Ersas/Fraunhofer Database with Soldering Problems/Solutions; Image processing/labelling; Measurement & Automatic Measure Control function as well as basic Reporting & Emailing functions



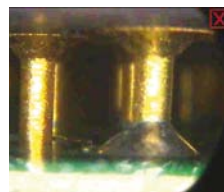
0° to 90° surface inspection



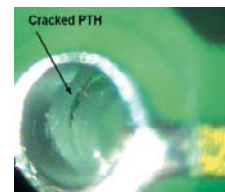
PQFP interior heel fillet inspection: non-wetting with lead-free paste



ImageDoc Basic inspection software



THT inspection under PGA









PCB inspection inside via hole










ImageDoc inspection software

ERSASCOPE 1 ordering information and technical data

Part Number	Description	Technical Data	Part
0VSSC070	ERSASCOPE 1 System consisting of:		
0VSSE100	ERSASCOPE 1 Endoscope with integrated lens and fibre optic system	focus ring & adjustable back light footprint 1.5 x 4.5 mm magnification up to 400x* typical inspection gap ~300 µm	
0VSCA1225	Digital USB Camera color inspection camera	digital (USB 2.0) manual or auto white balance 1/3" CMOS chip	
0VSTV036	TV-Adapter connects optical carrier to CCD camera	60 mm focal length C-Mount type	
0VSLS070	Halogen light source adjustable	(W x H x D): 130 x 55 x 235 mm 220 V – 240 V~, 50 Hz, 45 W or 115 V – 127 V~, 60 Hz, 45 W weight: ~1.8 kg	
0VSST210	ERSASCOPE stand with z-axis micrometer adjustment; inte- grated fibre optics & camera cables	W x H x D: ~500 x 400 x 520 mm total weight ~5 kg surface: antistatic includes 1000 mm coated fibre optic cable with gooseneck	
0VSXY090	ERSASCOPE 1 table with 4 PCB support columns	X-Y movement with fine adjust wheels; antistatic mat with grid dimension: ø 320 mm; weight: ~3 kg	
0VSID135	ImageDoc Basic 1.3	general inspection software	

ERSASCOPE 1 accessories

0VSUP6XL	Upgrade kit XL upgrades the ERSASCOPE stand and table for inspection of very large PCBs	antistatic XL table (600 x 700 mm), telescopic arm, optic holder and light cable extender	
0VSMS100	MAGNISCOPE 0° static endoscope with integrated lens & fibre optic system	focus ring, magnification up to 400x* *20" monitor, 1600 x 1200 pixel resolution, no digital zoom	
0VSMZ100	MACROZOOM lens for high magnification top view surface inspection	70 x zoom lens aperture adjustment: F 5.6 – 32 C focus adjustment: 180 – 450 mm	
0VSFR100	MACROZOOM ring light	optical fibre ring light	
0VSMZ300H	MACROZOOM holder	connects lens to stand	
	ERSASCOPE 2 Upgrade kit upgrade the ERSASCOPE systems to ERSASCOPE 2	for complete ordering info, contact your Ers representative directly	
0VSLLV200	Light fibre extension	L: 200 mm	
0VSLF200	Fibre light fan	L: 35 mm, W: 5 mm	
0VSLF300	Fibre optic light brush	L: 80 mm, W: ~10 to ~35 mm	
0VSRM100	Glass calibration scale	10 µm lines at 100 µm pitch	
0VSLC100	Lens cleaning kit	cleaning cloth, papers & liquid	
0VSSH100	Dust cover	antistatic textile	
0VSID201	ImageDoc EXP 2.0	professional inspection software	

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