



PCE Americas Inc.
711 Commerce Way
Suite 8
Jupiter
FL-33458
USA
From outside US: +1
Tel: (561) 320-9162
Fax: (561) 320-9176
info@pce-americas.com

PCE Instruments UK Ltd.
Units 12/13
Southpoint Business Park
Ensign way
Hampshire / Southampton
United Kingdom, SO31 4RF
From outside UK: +44
Tel: (0) 2380 98703 0
Fax: (0) 2380 98703 9
info@pce-instruments.com

www.pce-instruments.com/english
www.pce-instruments.com

Technical Microscope PCE-VM 21

The PCE-VM 21 consists of an optical microscope, CCD camera and monitor with LCD display. Due to the 75-fold magnification, it is possible to view very small parts very clearly. The PCE-VM 21 microscope is ideal for investigating solder joints on printed circuit boards, material defects on metal surfaces and more, making the PCE-VM 21 microscope a vital addition to your workshop.

- Continuous magnification from 10 ... 75 times
- Adjustable height for viewing of larger objects
- Transmitted light and incident light illumination
- Data transfer to PC via USB 2.0 connection
- User-friendly menu in 8 different languages
- Screen resolution of 800 x 600 pixels
- Fixed-increment, crossed-scale reticle for orientation purposes
- Direct viewing on the LCD display
- Digital video recording functionality
- Aluminum carrying case

Technical specifications

Total unit

Display	8" LCD
Resolution	800 x 600 pixels
Magnification	10 ... 75 times, continuous The magnification is the ratio between the object as observed on the screen and the actual size of the object. Relevant parameters are the enlargement of the lens / CCD eyepiece and size of the CCD lens / display.
Field of view	13.5 mm x 10 mm ~ 2.1 mm x 1.5 mm 0.5 in x 0.4 in ~ 0.08 in x 0.06 in
Power supply	100 ... 240 VAC, 50/60 Hz

Optical object lens of the microscope

Focus of the CCD eyepiece	0.5 times
---------------------------	-----------

Focus the main optical lens	0.7 times ... 4.5 times
Focus of the total optical lens	0.35 times ... 2.25 times
Working distance	95 mm / 3.7 in

CCD camera

Display chip	Sony
Horizontal resolution	700 TVL
Light source	Reflected and transmitted light, lighting adjustable
Video output	1.0Vp-p, 75 Ω
Video mode	PAL
Operating voltage	12 VDC
Connections	USB 2.0, AV out
System requirements	Windows 2000
Working height	Min. 40 mm / max. 210 mm Min. 1.6 in / max. 8.3 in
Power supply	100 ... 240 V AC, 50/60 Hz
Dimensions	Baseplate: 235 mm x 155 mm x 64 mm 9.3 in x 6.1 in x 2.5 in
Height of the vertical axis	250 mm / 9.8 in
Weight	Approx. 4.8 kg / 10.6 lbs

Halogen lamp

Operating voltage	100 ... 240 VAC, 50/60 Hz
Upper lamp	10 W / 12 V
Lower lamp	10 W / 12 V

Delivery contents

- 1 x PCE-VM 21 microscope
- 1 x USB interface cable
- 1 x video cable
- 1 x power cable
- 1 x dust cover
- 1 x aluminum carrying case with key
- 1 x object plate, glass
- 1 x contrast plate, black / white
- 1 x spare bulb for incident light illumination
- 1 x spare bulb for transmitted light illumination
- 1 x spare fuse
- 1 x cleaning cloth
- 1 x user manual