

# EOD VII Explorer Videoscope System



## Features

- Highly portable kit providing bright, hi-resolution colour images
- Working length up to 7.5m with tip angulation - up to 15m without
- 4, 6 or 8mm diameter with 4-way articulation
- Versatile system, with wide ranging applications, ideal for darker/larger voids
- Compact and light workstation (2.25Kg) incorporates 6.8" flipup screen
- Quick access menu buttons, with precise scope tip articulation
- Video recording and image capture by the push of a button
- High resolution CCD camera technology, producing stunning picture quality
- Feature packed system includes zoom function, digital recording onto SD card
- High density outer braid for maximum wear resistance and durability
- Battery or AC operation

## Applications

- Optical remote visual search and surveillance
- Port Security (inside the compartments of metal walls of 20ft & 40ft containers)
- Aircraft and ship inspection & maintenance
- Research & development
- Turbine blade and wave guide inspection
- UV curing and crack detection (NDT)
- Examination of internal structures without teardown, or for 'machine vision' applications



# Technical Specifications

## WORKSTATION

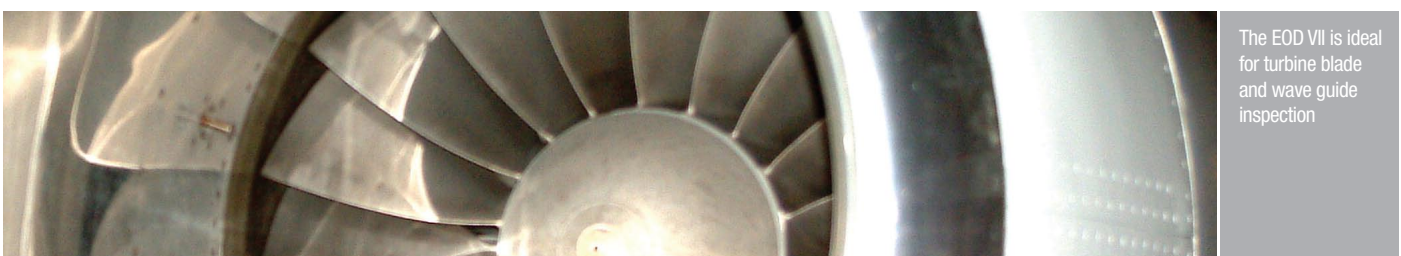
Control Panel	Zoom (3.5x), Image rotation (0° and 180°) Integration Modes: Auto, Short, Long, Manual Text generator for labeling annotations on inspection images On-screen menu, Camera Control / Image Sensor Control (Automatic, Manual, Program)
Video Interface	Composite Video-out / Composite Video-in, S-Video-in
Audio Interface	3.5mm jack Audio-in & Audio-out
Display	6.8" TFT, Resolution: 640 (H) x 480 (V)
Media	SD memory card up to 32GB Video Format AVI Audio Format BMP
Light Source	25W metal halide with light intensity control, stepless shutter/aperture
Power Supply	12V via AC Adapter, 12V via Battery (Power belt)
Operating Temperature	-25°C to +45°C (-13°F to +115°F)
System Storage Temperature	-25°C to +45°C (-13°F to +115°F)
Dimensions	290x190x70mm
Weight	2.25Kg (9.2Kg with Videoscope & Case)
Camera System	PAL or NTSC

## VIDEOSCOPE

Diameter	6mm (4, 8mm optional)
Length	3000mm (1500, 2000, 4000, 5000, 7500mm optional) with 4-way tip angulation (12000, 15000mm optional - no tip angulation)
Tip Deflection	4-way (160° up, 130° down, 100° left/right)
Forward Viewing	0°
Field of View	Supplied with two interchangeable forward viewing objectives 58° and 90° (wide angle field attachment)
Side Viewing	90° / 58°
Outer Covering	Tungsten braid sheathing
Image Sensor	¼" high resolution CCD chip with 330 TV lines
Video Standard	PAL/NTSC
Environmental Conditions	Air temperature of operation: -10°C to +80°C Water temperature of operation: 0°C to +30°C Range of pressure in air: 1 to 1.3 atmospheres Range of pressure in water: 1 to 1.3 atmospheres Flexible portion is stable in a water solution of 5% NaCl Storage: All components housed in lockable storage/transit case with protective foam (weather proof/shock proof) Splash proof head section Liquid proof /Waterproof: Probe and distal end up to 14.7 psi (1 bar/10.2m H2O-not 6mm SVTA) Relative Humidity: 95% max. - non condensing

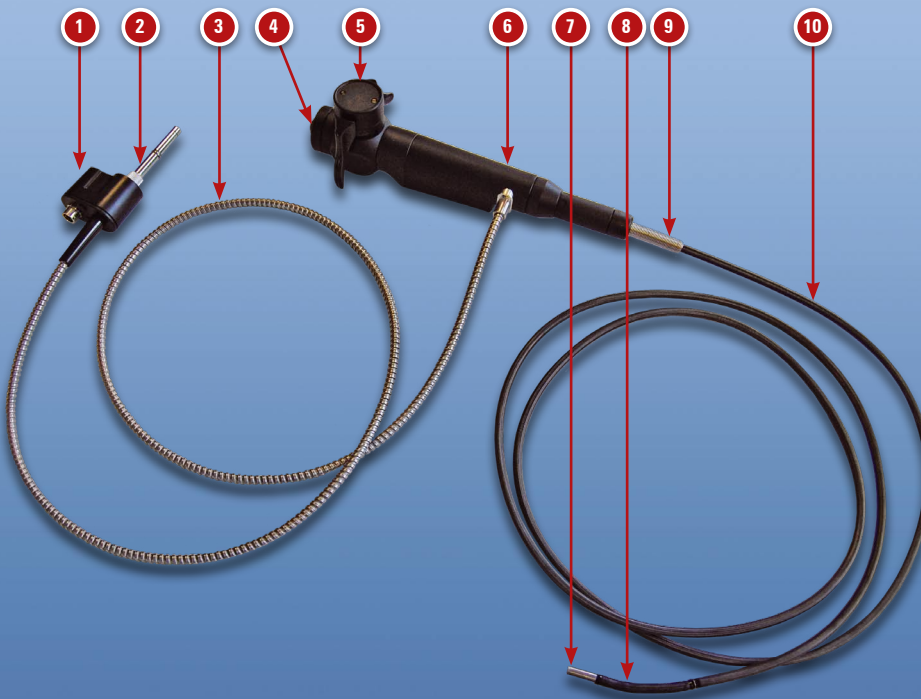
## Videoscope Availability Table

Diameter	Lengths (mm) - with Tip Angulation (160° up, 130° down, 100° left/right)	Lengths (mm) - without Tip Angulation
4mm	1500, 2000, 3000, 4000	
6mm	1500, 2000, 3000, 4000, 5000, 7500	12000, 15000
8mm	1500, 2000, 3000, 4000, 5000, 7500	12000, 15000



The EOD VII is ideal for turbine blade and wave guide inspection

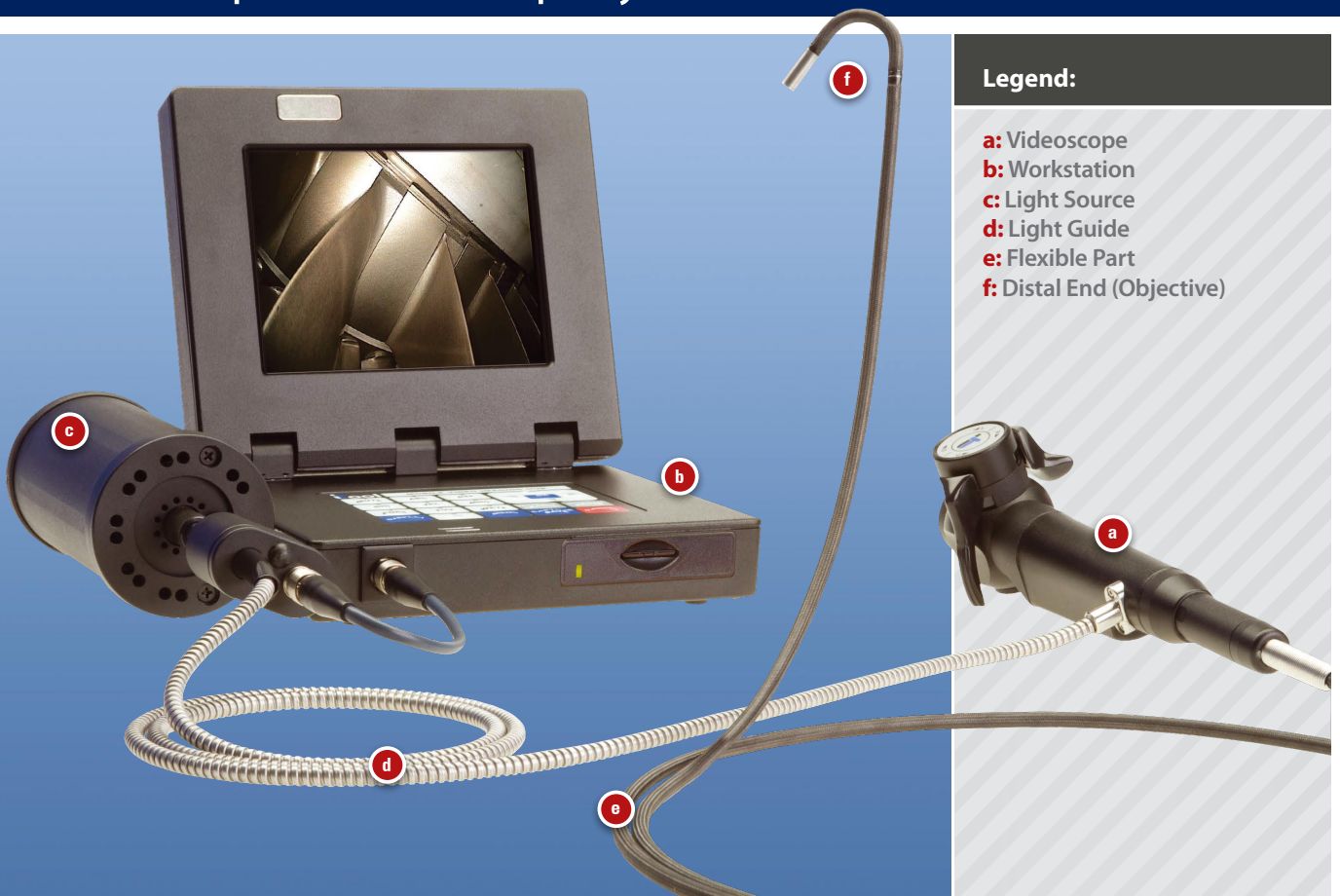
# Videoscope Guide



## Legend:

- 1:** Video/Power Lead Socket
- 2:** Light Guide Adapter
- 3:** Light Guide
- 4:** Image Capture Button
- 5:** Control Levers
- 6:** Head Section
- 7:** Distal End (Objective)
- 8:** Articulating Section
- 9:** Thread Connection for Guide Tube
- 10:** Flexible Part (Tungsten Braid Sheathing)

# EOD VII Explorer Videoscope System



## Legend:

- a:** Videoscope
- b:** Workstation
- c:** Light Source
- d:** Light Guide
- e:** Flexible Part
- f:** Distal End (Objective)

The EOD VII Explorer Videoscope system sets new standards for small, lightweight videoscopes. The compact package features a 6.8" daylight-view monitor with built-in digital recorder for taking still and moving images.

With so many containers arriving at ports and borders every day, the opportunity to transport goods illegally is almost limitless. The use of remote visual inspection equipment enables views to be obtained through small diameter holes, either existing or drilled.

The EOD VII can be used in tough environmental conditions, letting you inspect with confidence in tight areas. The EOD VII also provides greater light sensitivity and with lengths up to 7.5m with 4-way tip articulation is ideal for checking larger cavities and containers.

The high resolution flexible videoscope is designed to withstand tough industrial use, being built up with at least four thin protective coverings. The final covering is watertight PVC (2.9mm diameter) reinforced PUR (3.8mm diameter) or fine braid teflon impregnated stainless steel (diameter 5.5mm and up), providing excellent insertability and flexibility.

Recording to SD card (up to 32GB) is now possible with one-click for easy on-site operation. A 3.5x digital zoom allows you to view an object in its entirety in higher magnification. Inspection results can be easily retrieved and viewed. A title can be easily saved on an image in order to assure streamlined post-inspection work.

The user can operate diverse functions such as image enhancement (3.5x zoom), image rotation (0° and 180°), integration modes, recording all from the control panel available at the operator's fingertips.

The ergonomic lightweight videoscope with 4-way articulation control has been engineered for comfortable operation even during prolonged inspections. Navigating tight paths such as the insides of engines, has never been easier.

With its low-reflection display, the daylight-view monitor reproduces clear, vivid images even under sunlight. You can confidently bring the EOD VII to almost any difficult environment (workstation operating temperature -25° up to +45°C).

The insertion tube of the EOD VII videoscope will withstand temperatures up to +80°C.



The EOD VII is ideal for port security to search inside the compartments of metal walls of 20ft & 40ft containers

## Technology

Different resolution image bundles are used according to the particular diameter and length of the fiberscope supplied. Some fiberscopes employ quartz imaging fiber bundles with fiber size down to 3 microns which give superb resolution and brightness previously unobtainable with flexible instruments. Others employ high resolution glass fiber image bundles for maximum light transmission. Light is transmitted from a cold light source through optical fibers inside the instrument to the object being viewed.

### Warranty

The EOD VII comes with a return-to-base warranty against defective materials and workmanship for a period of 2 years from delivery.

### After Sales Support

Technical Support business hours (GMT)  
Monday – Friday 8.30am – 5.30pm  
E: [technicalsupport@winkelmann.co.uk](mailto:technicalsupport@winkelmann.co.uk)

### Training

Winkelmann and its partners are able to offer training in the operation of products – contact us today for more information.

## Product Code

### EOD VII Explorer Videoscope - Full System

3-299-078

EOD VII Explorer Videoscope System with fully mobile Video Workstation with 6.8" flip up high resolution TFT daylight viewable monitor, still and video recording onto SD-Memory Card up to 32GB, 3.5x image and video zoom. Digital Video Recording AVI Format (.avi), Image Capturing in BMP Format (.bmp), Audio Recording, Text generator for labelling annotations on inspection images, On-screen menu, Camera Control / Image Sensor Control (Automatic, Manual, Program), 25W metal halide light source, light intensity control. Power supply 12V via AC adapter, 12V via Battery (Power belt). Videoscope diameter 6mm, Length 3000mm with 4-way tip angulation. Interchangeable objectives 0°/58° and 0°/90° with side view tip adapter 90°/58°. Resolution 1/4" CCD 330 TV lines, covering tungsten braid, video signal: PAL (NTSC on request)

### For further information contact

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