

Versatile, Scalable and Cost effective Full HD Video Inspection System for Fast Ergonomic and Reliable Optical Inspection. The W20x HD has a Powerful 20x Optical Zoom with Swift Auto Focus for Clear Inspection of your parts in True High Definition.

## Optilia sets for W20x-HD inspection systems:



W20x-HD, Full HD 20x zoom Inspection Camera System with Laser Pointer, Focusing Stand, Control Unit and Ring Light

Product no. OP-109 004, -M, -E

Included items:

W20x-HD, 20x zoom camera with laser pointer Camera Control Unit with Joystick

White LED Ring-Light set with Segment Control Focusing Stand for W20x-HD

24" HD LED monitor

Power Supply 5/12V, 30W with MiniDin connector

user´s manua



W20x-HD, Full HD 20x zoom Inspection Camera System with Laser Pointer, Boom Stand and Control Unit

Product no. OP-109 003, -M, -E

Included items:

W20x-HD, 20x zoom camera with laser pointer Camera Control Unit with Joystick

Boom Stand for W20x-HD

24" HD LED monitor

Power Supply 5/12V, 30W with MiniDin connector

ser´s manual



W20x-HD, Full HD 20x zoom Inspection Camera System with Laser Pointer, Boom Stand and camera Control Software

Product no. OP-109 002, -M, -E

luded items:

W20x-HD, 20x zoom camera with laser pointer

Boom Stand for W20x-HD

Remote camera control PC software package for HD cameras

Power Supply 5/12V, 30W with MiniDin connector

user´s manua

(monitor seen on picture is not included in OP-109 002)

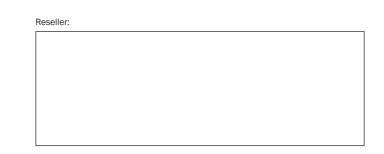
W20x-HD cameras and accessories are made of high quality components, anodized aluminum-, stainless steel- and injected plastic parts.

M-version of W20x-HD features Hermetically Sealed optical system and housing which prevents deposit of dust, dirt or germs inside the camera. It is easy and safe to clean the camera with most of the antibacterial wipes and solvets.

E-version of W20x-HD camera has an Antistatic housing and is safe for ESD-sensitive PCB inspection work.



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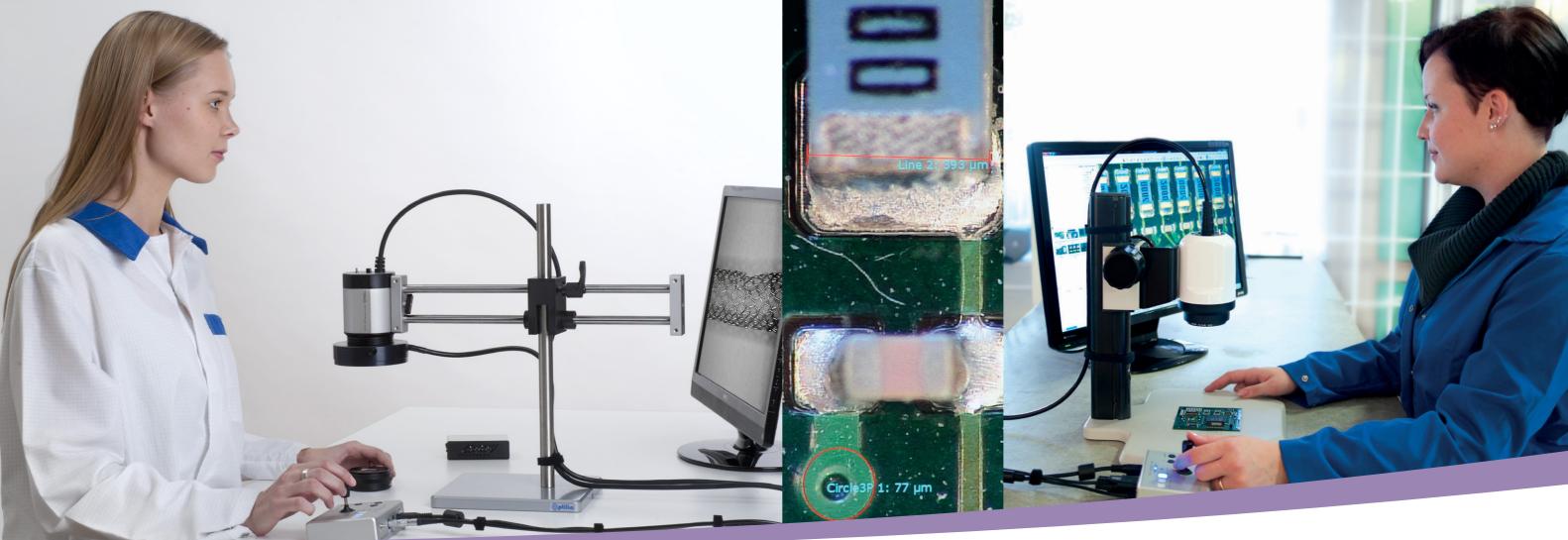


# W20x-HD

High Definition Inspection Camera System







## Making inspection easier

Professional High Definition inspection cameras with 20x optical zoom, autofocus, large working distance and laser pointer for reliable, ergonomic and fast Visual Inspection work. Connect Optilia HD camera to a High Definition monitor and take advantage of the astonishing image resolution, high contrast and true colours in your inspection work.

The built-in laser pointer aims at the area of interest and assists in locating it on the screen. To further simplify operations, selected functions can be controlled by a foot pedal.

System's 3 - 60x on-screen magnification (32" monitor) is comparable to common inspection microscopes. If further magnification is needed, close-up lenses can be added to magnify up to 300x.

Parameter	HD Video Inspection	Stereo Microscope
Ergonomy	Excellent	Poor
Large Working Distance	Excellent	Good
Large Field of View	Excellent	Good
Flexibility	Excellent	Good
Depth of View	Good	Excellent

"Reduce the time spent on inspection"



## Designed for ergonomic use

The W20x-HD provides relief to the user's eyes, neck and shoulders. While most ocular microscopy systems offer excellent imaging, the W20x HD takes optical inspection to new dimensions and allows operators to sit comfortably in a good working position and carry out their tasks efficiently. By sitting more comfortably and watching the monitor, the inspection task is no longer tiresome.

Application	HD Video Inspection	Stereo Microscope	
Ergonomic Inspection	Excellent	Poor	
Video/Image recording	Excellent	Optional	
Documentation	Excellent	Optional	
Measurements	Good	Good	

The Optilia System offers greater flexibility to users with different inspection and monitoring needs. Apart from transferring excellent details from the Object to the High-Definition Monitor, it offers true ease of use and minimal interaction with controls and settings.

Together with Optilias various boom and focusing stand models, users gain full control over the working area, distance to the object and viewing angles. The W20x-HD camera significantly reduces the time spent on inspecting parts compared with other optical visual systems.

Image attributes, such as zoom, brightness, focus, aperture size, exposure time and colour are automatically set but can be also controlled manually by the user through the camera control software or from the joystick-based and user-friendly Control Unit without the need of a PC.



"Designed for ergonomic use and excellent working standards"

## The power of a "click"

Optilias New OptiPix™ software streamlines Image Capture, Measurement and Archiving, while improving the accuracy of your results. Together with the W20x-HD, OptiPix allows you to work with live High Definition images. For further analysis, measurements or archiving, the images can easily be frozen or saved by a click or by pressing a key or a foot pedal.

Calibrated Measurements of Distance, Radius, Curve length, Area and Angles can be over-layed on images. Measurement results are automatically saved and linked to the images.



OptiPix Software allows you to define and overlay grids, rectangles and cross-hairs on live images. The software offers flexible zooming capabilities, live-to-still and still-to-still image comparison, annotation, image information and a powerful secure database among other useful functions.

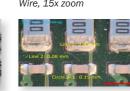


Plastic balloon, 10x zoom









Stent, 20x zoom, +10 Flectronics, 20x zoom, +5

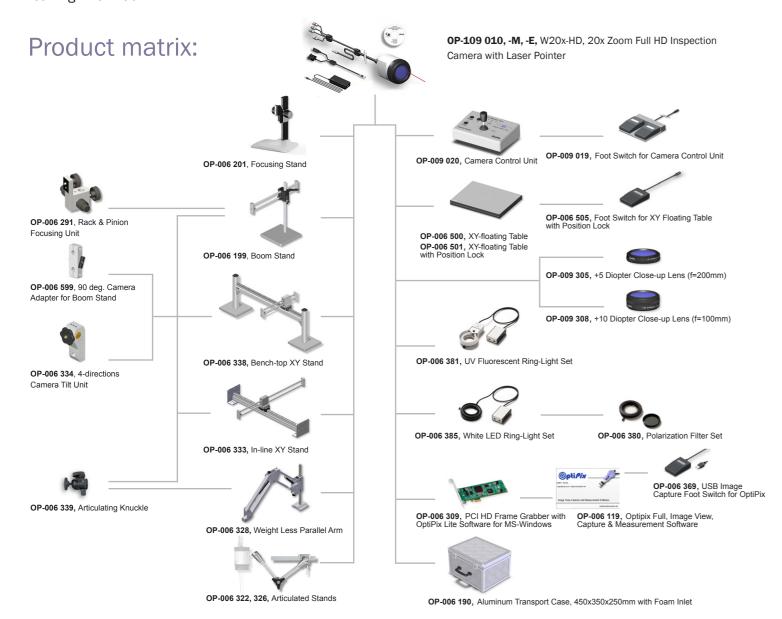
"Explore power of OptiPix software combined with brilliance of the HD pictures"

## W20x-HD

High Definition Inspection Camera with Laser Pointer



Versatile, scalable and cost effective video inspection system for fast and reliable optical inspection. The W20x has a powerful 20x optical zoom, extended working distance and a swift auto focus for clear examination of your object in real High Definition.



#### Technical specification

Image Sensor O 1/2.8" CMOS, ~ 3.2M pixels Picture Quality O Full HD 1080p (1920x1080)

Output Signal O 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, PAL, NTSC

Optics O 20x optical zoom with auto focus, F1.6 (F3.5 at 20x) to F14

Working Distance (w/o Close-up)  $\bigcirc$  ~ 190 - 245 mm Working Distance with +5 Close-up  $\bigcirc$  ~ 90 - 100 mm Working Distance with +10 Close-up  $\bigcirc$  ~ 55 - 60 mm

Field of View at  $1x z com \bigcirc \sim 240 \times 135 \ mm$  Field of View at  $10x z com \bigcirc \sim 24 \times 13.5 \ mm$  Field of View at  $20x z com \bigcirc \sim 12 \times 6.7 \ mm$  Field of View at  $20x z com \bigcirc \sim 5.5 \times 3.1 \ mm$  Field of View at  $20x z com \bigcirc \sim 3.6 \times 2.0 \ mm$  ( $\sim 3x magnification on 32" monitor$ ) ( $\sim 60x magnification on 32" monitor$ ) ( $\sim 130x magnification on 32" monitor$ ) ( $\sim 130x magnification on 32" monitor$ ) ( $\sim 200x magnification on 32" monitor$ )

Camera Control O External Control unit device with Joystick or PC Control Software via serial COM or USB port

Adjustable parameters O Optical zoom, iris, exposure (shutter speed), brightness, focus, white balance (colour), picture freeze, NIR-vision mode, image rotate, negative picture and setup Save & Recall

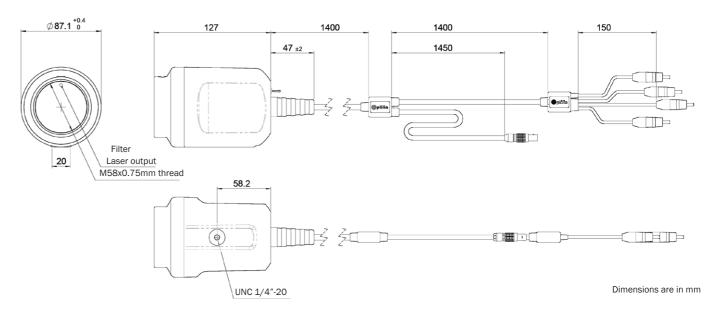
Laser pointer O Red LED laser, 0,5mW output power, Laser Class 2
Inputs/outputs O DC in (5-pin MiniDin), Serial RS-232 (DB9-F or via COM-USB adapter),
HD Component Y/Pb/Pr Video out (RCA), PAL/NTSC Video out (RCA)

Storage Environment O -20° - +60°C, 5 - 90% RH, non-condensing Operating Environment O 0° - +50°C, 5 - 90% RH, non-condensing Power Requirement O 12.0 VDC, 4.0 W max

Weight O 900 gr. max

Model options O W20x-HD (Standad)
W20x-HDE (ESD-protected)
W20x-HDM (Medical approved)

#### **Dimensions:**





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