# THE PORTABLE VIDEOSCOPE

MADE IN GERMANY

viZaar®
industrial imaging AG

FROM Ø **4 MM** UP TO **6.6 M** PROBE LENGTH

# THE PORTABLE ALL IN ONE SOLUTION

The VUCAM series offers everything you need from a portable video endoscope.

Completely new standards were set during its development:

- Highest quality in manufacturing and production
- Flexible and torsionally rigid at the same time
- Robust and durable
- All necessary functions in one portable system
- ALL-IN-ONE-HAND for easy operation
- Intuitive user interface
- Customer special solutions possible

5.7"
640 x 480

DUAL HIGH POWER LED LIGHT SOURCE
LIFETIME GUARANTEE

CARBON LIGHT DESIGN

# ONE PRODUCT SERIES FOR MULTIPLE PURPOSES

## VUCAM® XO / XO+

**6 mm videoscope with interchangeable optic adapters**

Designed for applications starting at Ø 6 mm. Especially useful for weld seam inspections, heat exchanger inspections, plant maintenance, construction supervision, FOSAR, personnel search as well as military and security technology. The VUCAM XO/XO+ is available in probe lengths from 2.2 m to 6.6 m and offers three optional optic adapters.

**Optic adapters for 4 mm and 6 mm probes**

## VUCAM® XF / XF+

**4 mm videoscope with interchangeable optic adapters**

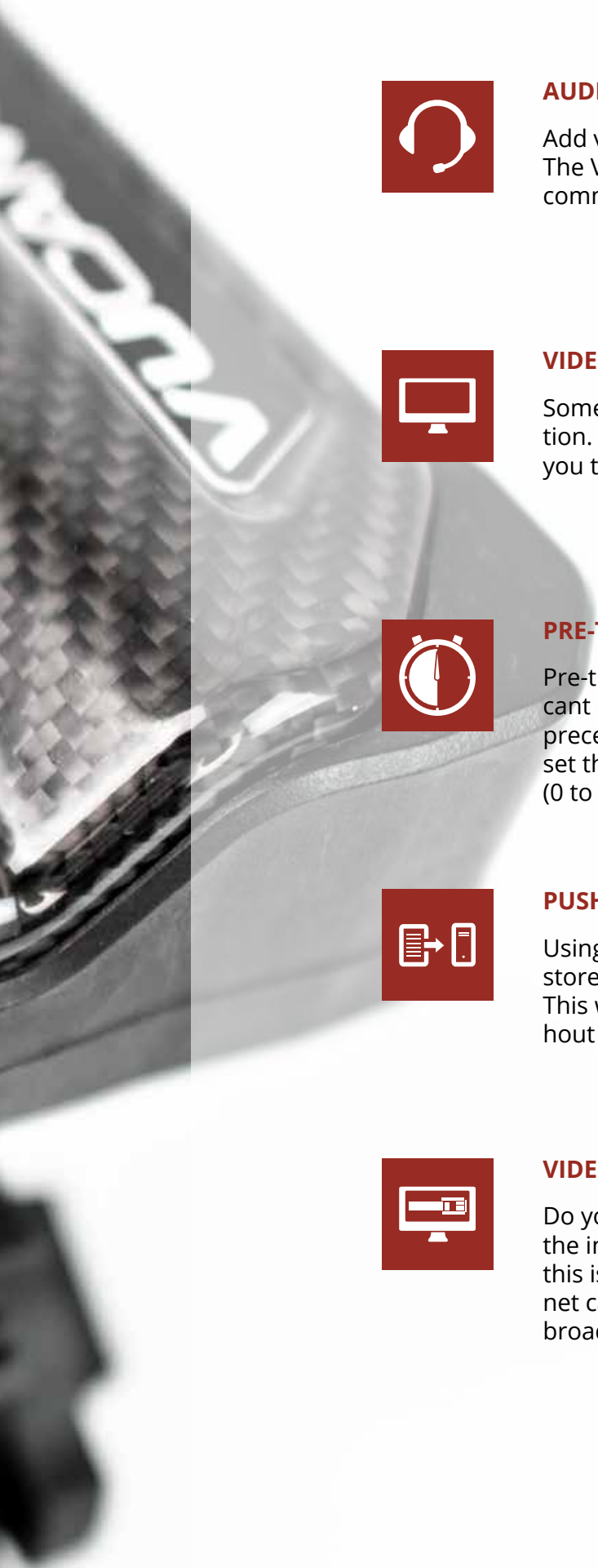
Especially suitable for testing thin tubes and pipe bends starting at Ø 4 mm. The VUCAM XF/XF+ is e. g. used for weld seam inspections, gear and bearing inspections, in the wind and water power sector, in the automotive sector as well as in defense and safety engineering. Available in probe lengths from 1.1 m to 6.6 m with two optional side view adapters.

"+" models denote additional features such as TV OUT, video over LAN and PUSH to FTP.

# QUALITY IN EVERY SINGLE FIBER

Every VUCAM is packed with a wide range of useful functions.
All these features are integrated into a simple and intuitively controllable touchscreen interface.

# SEE MORE WITH THE VUCAM+ MODELS



## AUDIO COMMENTARY

Add voice to your inspection:
The VUCAM+ offers the possibility to add audio commentaries to your video recordings.

## VIDEO OUT

Sometimes it is better to use a larger screen for your inspection. The VUCAM+ version comes with a video out, allowing you to connect an external monitor.

## PRE-TRIGGER RECORDING

Pre-trigger recording ensures that you capture every significant detail. When you press the record button, the seconds preceding the recording are automatically added. You can set the duration of the pre-trigger recording (0 to 30 seconds) in the menu.

## PUSH TO FTP

Using the Ethernet connection, it is possible to automatically store image and video recordings on a central storage drive. This way, you have direct access to the captured data without interrupting the inspection process.

## VIDEO VIA LAN

Do you need a second opinion or would you like to follow the inspection remotely? With the Video-via-LAN function, this is no longer a problem. Connect the VUCAM via Ethernet cable to a network and stream the video to either a broadcast or a unicast.

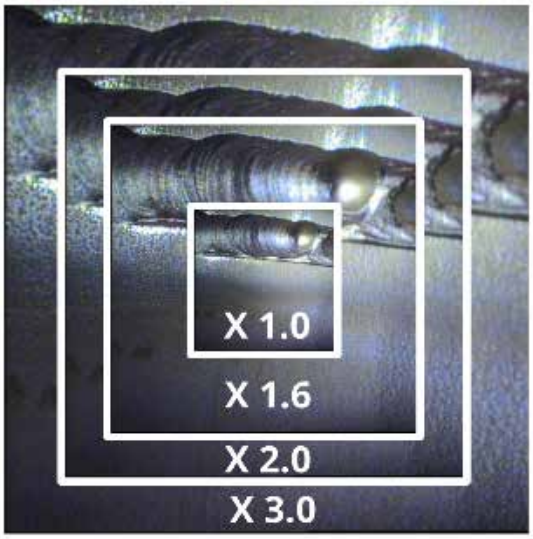
# ALL FEATURES AT ONE GLANCE

## Your productivity is the key criterion for viZaar

Every step in the production process is carefully carried out so that each product offers maximum performance and durability.
The VUCAM is considered one of the most robust inspection systems on the market. Its housing is made of modern carbon fiber and its handle consists of high quality and light aluminium. This quality allows us to guarantee maximum safety and minimum weight. Therefore, we offer a lifetime warranty on all carbon fiber components of the VUCAM.

LIFETIME
WARRANTY
ON ALL
CARBON FIBER
COMPONENTS

# QUALITY MEETS PRECISION




## DIGITAL ZOOM

Touch the inspection image and benefit from the zoom factors x 1.6, x 2.0 and x 3.0 – for even more details.

## FULL SCREEN MODE

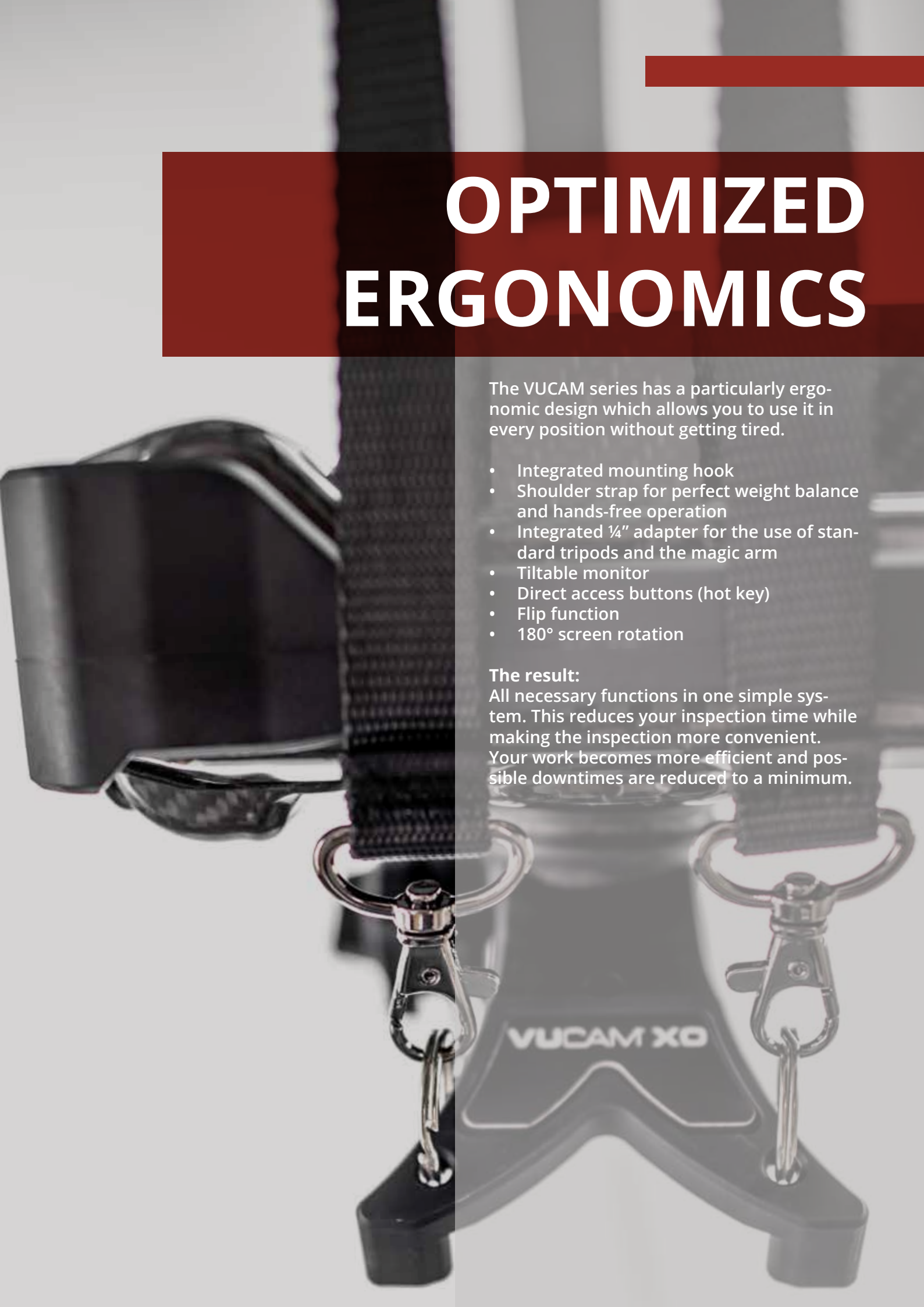
The VUCAM offers you the choice between looking at the inspection image with the user interface visible (standard setting) and looking at the image in full screen by simply tapping on it.

# OPTIMIZED ERGONOMICS

The VUCAM series has a particularly ergonomic design which allows you to use it in every position without getting tired.

- Integrated mounting hook
- Shoulder strap for perfect weight balance and hands-free operation
- Integrated ¼" adapter for the use of standard tripods and the magic arm
- Tiltable monitor
- Direct access buttons (hot key)
- Flip function
- 180° screen rotation

**The result:**
All necessary functions in one simple system. This reduces your inspection time while making the inspection more convenient. Your work becomes more efficient and possible downtimes are reduced to a minimum.



# OPTIMIZED FOR EVERY ANGLE

## FLIP (HORIZONTALLY, VERTICALLY AND BOTH)

The VUCAM is equipped with a number of features for image enhancement in order to improve and simplify your inspection. You can, for example, flip the image on the VUCAM display either horizontally or vertically or both. The FLIP function improves orientation and ergonomics during inspections.

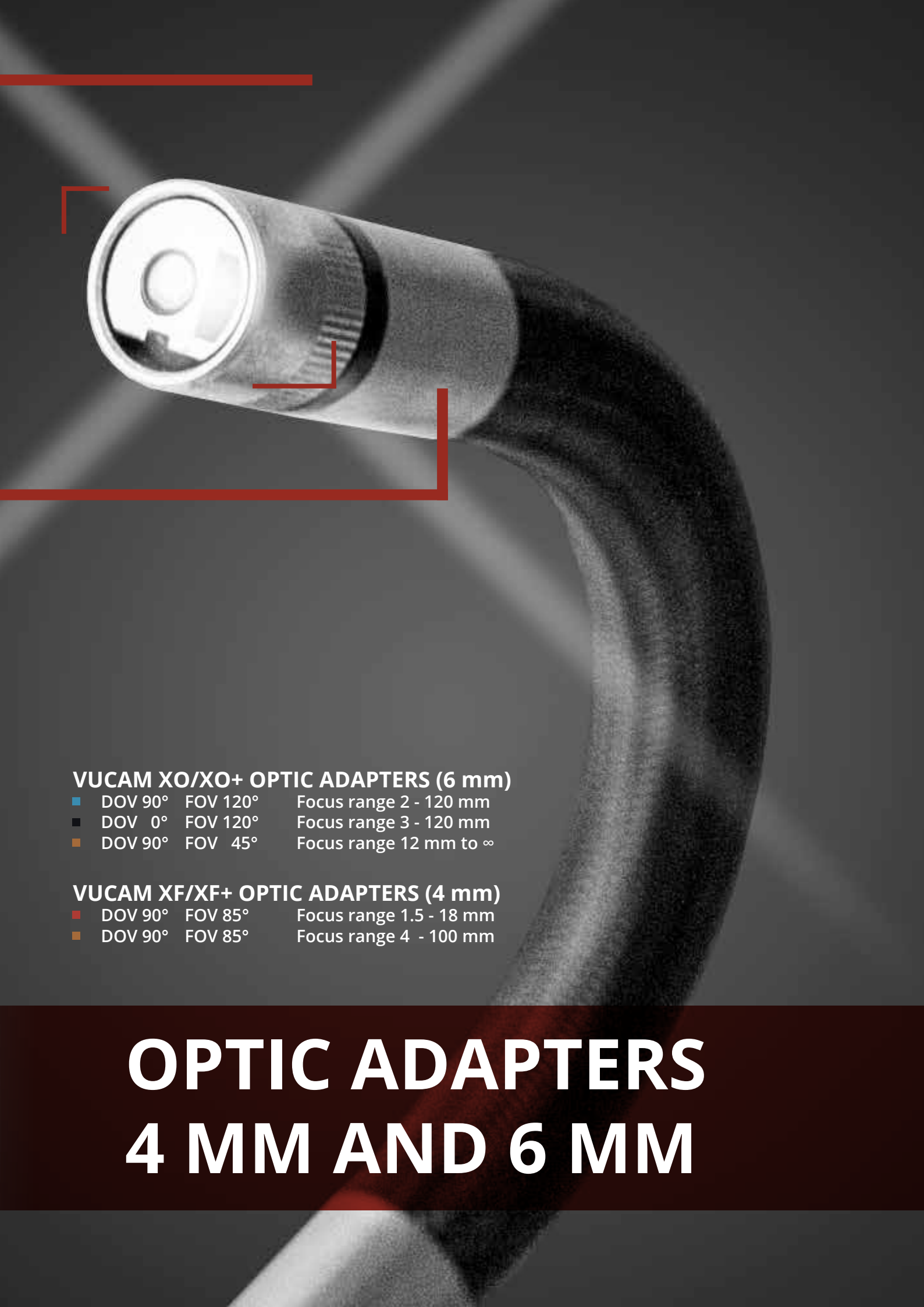
## SCREEN ROTATION

This feature allows for the complete rotation of the screen, including user interface, making it possible to work with the device upside down.

# EXTENDED PERSPECTIVES

There are three optic adapters available for the VUCAM XO and two optic adapters for the VUCAM XF to optimally adjust direction of view, field of view and focal range for your individual inspection.

The VUCAM XO is compatible with a number of optic adapters made by other manufacturers. So if you already own other 6 mm optic adapters, you will most likely be able to use them with the VUCAM XO. For further information about compatible models please contact your local viZaar partner.



## VUCAM XO/XO+ OPTIC ADAPTERS (6 mm)

- DOV 90° FOV 120° Focus range 2 - 120 mm
- DOV 0° FOV 120° Focus range 3 - 120 mm
- DOV 90° FOV 45° Focus range 12 mm to ∞

## VUCAM XF/XF+ OPTIC ADAPTERS (4 mm)

- DOV 90° FOV 85° Focus range 1.5 - 18 mm
- DOV 90° FOV 85° Focus range 4 - 100 mm

# OPTIC ADAPTERS 4 MM AND 6 MM

# MORE LIGHT FOR IMPROVED VISUAL TESTING

Our VUCAM series is equipped with the latest **LED technology**. This ensures the best illumination and color temperature as well as maximum lifetime. The camera head remains cool, even at maximum illumination, thanks to viZaar's special fiber technology.

We offer lifetime warranty on the LED illumination of all VUCAM models.

LIFETIME
WARRANTY
ON THE
LED ILLUMINATION

# DYNAMICS AND ARTICULATION

Flexibility is one of the key requirements for a successful inspection. The VUCAM series offers a full 4 axis articulation up to 160°. The articulation is precise, smooth and simple to use.

The exceptional articulation is controlled via two ergonomically designed handwheels. The precise and highly sensitive manual control is superior to any motor-driven camera head articulation. Benefit from the low susceptibility to error of the control mechanism, whereby even the smallest resistance at the probe tip is immediately perceived. Thanks to the direct feedback, the risk of damage is significantly reduced, so is the risk of getting the probe stuck. The design as entirely mechanical articulation without servo motor, we were able to minimize weight and maintenance effort for you.

# ALWAYS READY

viZaar offers additional VUCAM spare batteries. It is very simple to replace the batteries on site. The LiFePo batteries are absolutely safe and therefore also suitable for air transport*. Use your VUCAM when, where and as long as you need it.

*Please beware the specific regulations of your country.

# EVERYTHING IN ITS PLACE

Each VUCAM is delivered in a specially designed and extremely robust transport case. This way, you can be assured that your VUCAM is always secure during shipping and transport. The inspection equipment can easily be stored and is quickly at hand when it's needed.

# VUCAM® XO / XO+

| TECHNICAL DATA | VUCAM XO | VUCAM XO+ |
|---|---|---|
| **Diameter** | 6.0 mm / 0.23“ | |
| **Working length** | 2.2 m / 7.2 ft. \| 3.3 m / 10.8 ft. \| 6.6 m / 21.6 ft. | |
| **Articulation** | 4x130° - 2.2 m \| 4x120° - 3.3 m \| 4x100° - 6.6 m | |
| **Direction of view (DOV)** | Standard 0° | |
| **Field of view (FOV)** | Standard 45° | |
| **Focal range** | 15 mm to ∞ | |
| **Optional optic adapters** | 3 available options:<br>DOV: 90°, FOV: 120°, DOF: 2 - 120 mm<br>DOV: 90°, FOV: 45°, DOF: 12 mm - ∞<br>DOV: 0°, FOV: 120°, DOF: 3 - 120 mm | |
| **Fullscreen mode** | ✔ Touch screen to activate | |
| **TV-OUT** | - | ✔ Via VULINK cable |
| **Audio-IN/OUT** | - | ✔ Via VULINK cable - Headset included, for audio commentary |
| **Video-via-LAN** | - | ✔ Via VULAN cable - unicast / broadcast / push to FTP |
| **Digital zoom** | ✔ | ✔ |
| **FLIP (H / V / B)** | ✔ | ✔ |
| **Screen rotation** | ✔ | ✔ |
| **Pre-trigger function** | ✔ | ✔ |
| **Probe construction** | Four layers \| Torsion-resistant and flexible \| Final layer: cut resistant tungsten | |
| **Illumination** | Special high power hybrid LED glass fiber illumination \| Digital illumination control (auto/manual) | |
| **Luminosity** | Lifetime warranty \| High efficiency LED illumination \| Color temperature: 6.500 K (daylight quality) | |
| **Display** | High resolution 5.7“ LED backlight TFT touchscreen \| 640 x 480 px \| anti glare | |
| **Dimensions display unit** | (h) 75 x (w) 200 x (d) 128 mm / (h) 2.95 x (w) 7.87 x (d) 5.04 inch | |
| **Monitor** | Carbon fibre construction with rubber bumpers: shock absorption for display \| Dust and splash water protected | |
| **Handle** | Handle and articulation control coated with high-strength aluminium | |
| **Data storage** | SD card 16 GB (optional up to 32 GB) | |
| **Power supply** | LiFePo Battery 6.4 V \| Mains input 100 - 240 VAC 50/60 Hz, output 12 VDC max. 2.5 A \| Battery replacement on site<br>Air transportable \| Charge during operation \| Quick charge | |
| **Image and video recording** | Pre-trigger recording \| Freeze \| MPEG and JPEG files | |
| **Mounting** | ¼“ mounting for operation with standard tripods and magic arms Manfrotto© | |
| **Integrity** | Water and pressure tested \| Probe: 1.5 bar fully immersible over the full length IP 68<br>System: IP 54 splash water and dust protected | |
| **Weight** | > 1.5 kg incl. battery, plus probe | |
| **Shock resistance** | Vibration 3 grms random at 20Hz to 2 kHz, 10 min per axis; Shock 50 grms 11 ms half-sine three axis | |
| **Temperature** | System in operation: -20°C (-4°F) to +50°C (+122°F), storage: -40°C (-40°F) to +70°C (+158°F)<br>Probe in operation: -10°C (+14°F) to +80°C (+176°F) | |

Are you missing the ideal configuration, e. g. a different probe length, for your individual application?
Contact us! viZaar is specialized in the development of customized special solutions. We will gladly assist and advise you.

# VUCAM® XF / XF+

| TECHNICAL DATA | VUCAM XF | VUCAM XF+ |
|---|---|---|
| **Diameter** | 4.0 mm / 0.15“ | |
| **Working length** | 1.1 m / 3.61 ft. \| 2.2 m / 7.2 ft. \| 3.3 m / 10.8 ft. \| 6.6 m / 21.7 ft. | |
| **Articulation** | 4x160° \| 4x80° - 6.6 m | |
| **Direction of view (DOV)** | Standard 0° | |
| **Field of view (FOV)** | Standard 85° | |
| **Focal range** | 4 mm to 200 mm | |
| **Optional optic adapters** | 2 available options:<br>DOV: 90°, FOV: 85°, DOF: 1.5 - 18 mm<br>DOV: 90°, FOV: 85°, DOF: 4 - 100 mm | |
| **Fullscreen mode** | ✔ Touch screen to activate | |
| **TV-OUT** | - | ✔ Via VULINK cable |
| **Audio-IN/OUT** | - | ✔ Via VULINK cable - Headset included, for audio commentary |
| **Video-via-LAN** | - | ✔ Via VULAN cable - unicast / broadcast / push to FTP |
| **Digital zoom** | ✔ | ✔ |
| **FLIP (H / V / B)** | ✔ | ✔ |
| **Screen rotation** | ✔ | ✔ |
| **Adjustable buffer** | ✔ | ✔ |
| **Probe construction** | Four layers \| Torsion-resistant and flexible \| Final layer: cut resistant tungsten | |
| **Illumination** | Special high power hybrid LED glass fiber illumination \| Digital illumination control (auto/manual) | |
| **Luminosity** | Lifetime warranty \| High efficiency LED illumination \| Color temperature: 6.500 K (daylight quality) | |
| **Display** | High resolution 5.7“ LED backlight TFT touchscreen \| 640 x 480 px \| Anti glare | |
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| **Weight** | > 1.5 kg incl. battery , plus probe | |
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# OPTIONAL ACCESSORY KITS

## PRO

### XO PRO KIT:

Battery charger
Optic adapter storage box
Side view optic adapter 90° DOV, 120° FOV
Straight view optic adapter 0° DOV, 120° FOV
32GB SD card
VUCAM spare batteries (LiFePo)
Shoulder strap
Screen protector

### XF PRO KIT:

Battery charger
Optic adapter storage box
Side view optic adapter:
90° DOV, 85° FOV (1.5 - 18 mm)
32GB SD card
VUCAM spare batteries (LiFePo)
Shoulder strap
Screen protector

## PREMIUM

### XO PREMIUM KIT:

Battery charger
Optic adapter storage box
Side view optic adapter 90° DOV, 120° FOV
Straight view optic adapter 0° DOV, 120° FOV
Side view optic adapter 90° DOV, 45° FOV
2x 32GB SD card
VUCAM spare batteries (LiFePo)
Shoulder strap
2x screen protector

### XF PREMIUM KIT:

Battery charger
Optic adapter storage box
2x side view optic adapter:
90° DOV, 85° FOV (1.5 - 18 mm)
90° DOV, 85° FOV (4 - 100 mm)
2x 32GB SD card
VUCAM spare batteries (LiFePo)
Shoulder strap
2x screen protector

www.vizaar.com

FURTHER INFORMATION

# VUCAM®

## XPANDING YOUR VU®


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