XSIGHT

ONE

2022

ONE DIC VIDEO EXTENSOMETER CATALOG

XSIGHT

ONE SERIES

The ONE series video extensometers are smart and easy-to-use devices for routine testing in both industrial and R&D environments.
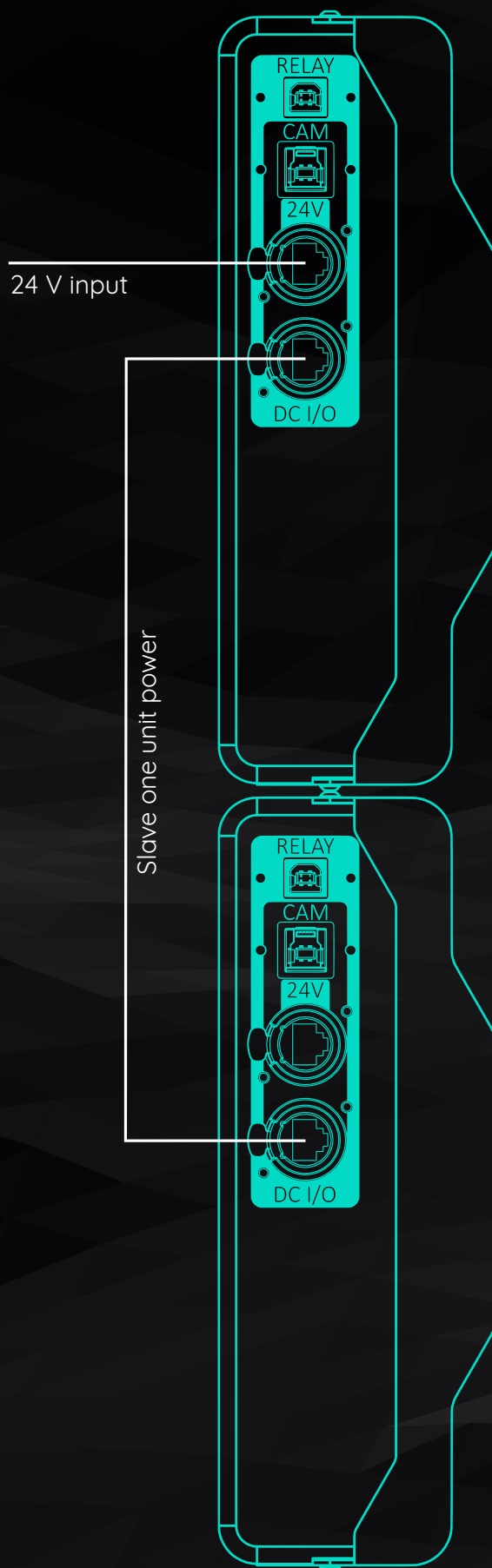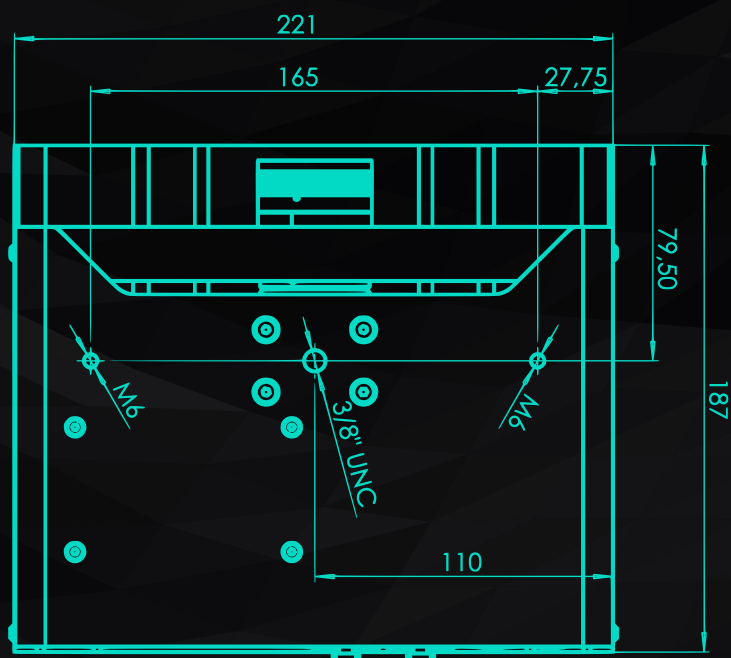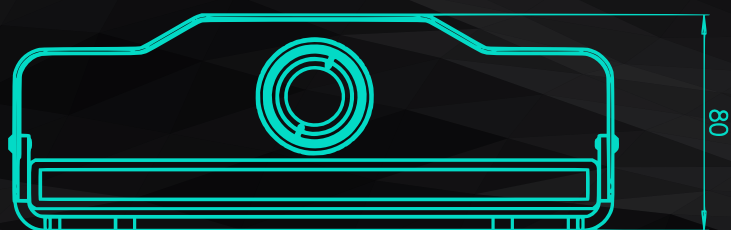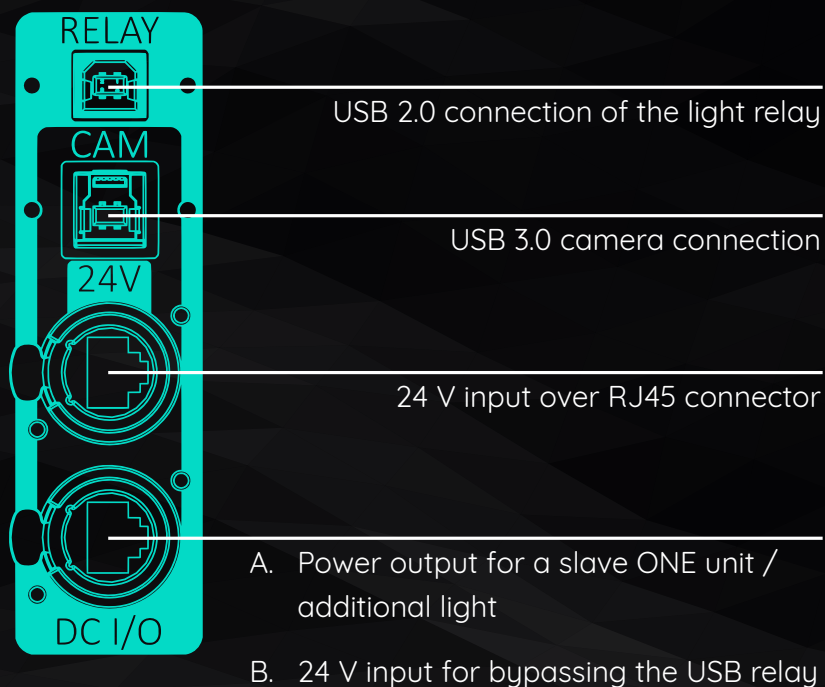
The compact housing includes a monochromatic LED bar light and can be mounted directly to a testing machine frame, creating a lean test setup, or fixed to a tripod using standard screw threads.

The lens is easily accessible and can be changed in a short time to equip the ONE measuring device for diverse applications.

Features

- An all-in-one solution
- Stackable
- Lens and LED light included
- Automatic light ON/OFF
- Axial or Transversal Alpha software license included
- One measurement grid
- All cabling included
- Easy to mount

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ONE WIRING

RELAY

CAM

24V

DC I/O

USB 2.0 connection of the light relay

USB 3.0 camera connection

24 V input over RJ45 connector

A. Power output for a slave ONE unit / additional light

B. 24 V input for bypassing the USB relay

24 V input

Slave one unit power

RELAY

CAM

24V

DC I/O

RELAY

CAM

24V

DC I/O

80

221

165

27,75

79,50

187

M6

3/8" UNC

M6

110

ONE MODES

Single Mode

The most common setup. Multiple single cameras can be used simultaneously.
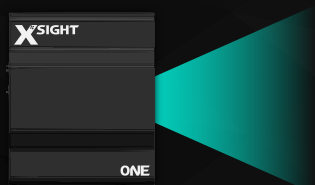
Joined Mode

Identical FoVs where a point can travel between cameras.

Dual FoV Mode

An uncommon setup with different resolutions.

In cases when the field of view of one camera is less than 210 mm, it is not mechanically possible to merge the fields of view. That means the JOINED mode is not applicable.

However, this setup can still be used for multiple standalone views calibrated into one coordinate system. The typical use is measurement of long specimens with a relatively small extension.

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ONE-M2
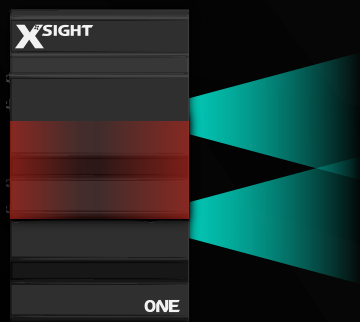
Specification

- Single camera resolution: 2.3 MPx
- 1/1.2" sensor size
- CMOS sensor
- 5.86 um pixel size
- USB 3.0 interface
- 43 Hz at full resolution
- C-Mount lens mounting
- S-Series lens recommended

Sampling Rate [Hz] vs Percentage of the full Width of View [%]
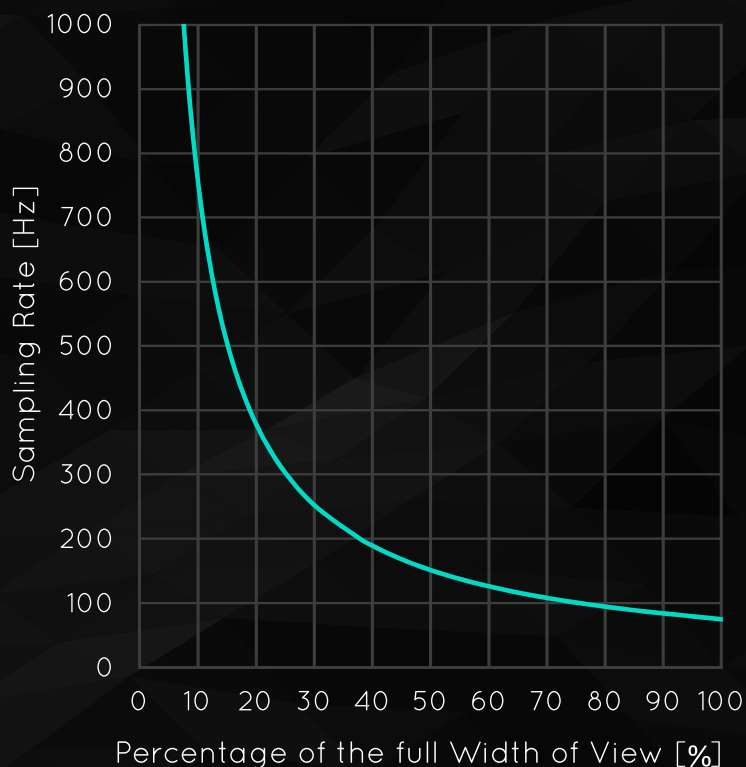
ISO 9513	Field of View [mm]						Working Distance [mm]				
	ONE1-M2		ONE2-M2		ONE3-M2		Lens Focal Length				
	Height	Width	Height	Width	Height	Width	12mm	16mm	25mm	35mm	50mm
Class 0.5	110	70	2x110	70	3x110	70	-	134	237	322	430
Class 1	190	120	360	120	530	120	176	253	416	571	785
Class 2	380	238	720	238	1060	238	379	523	841	1155	1630

Separate Fields of View; for Joined mode check ONE-M9

Additional lighting may be needed

ONE1-M2

ONE2-M2

ONE3-M2

XSIGHT
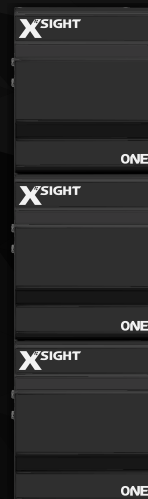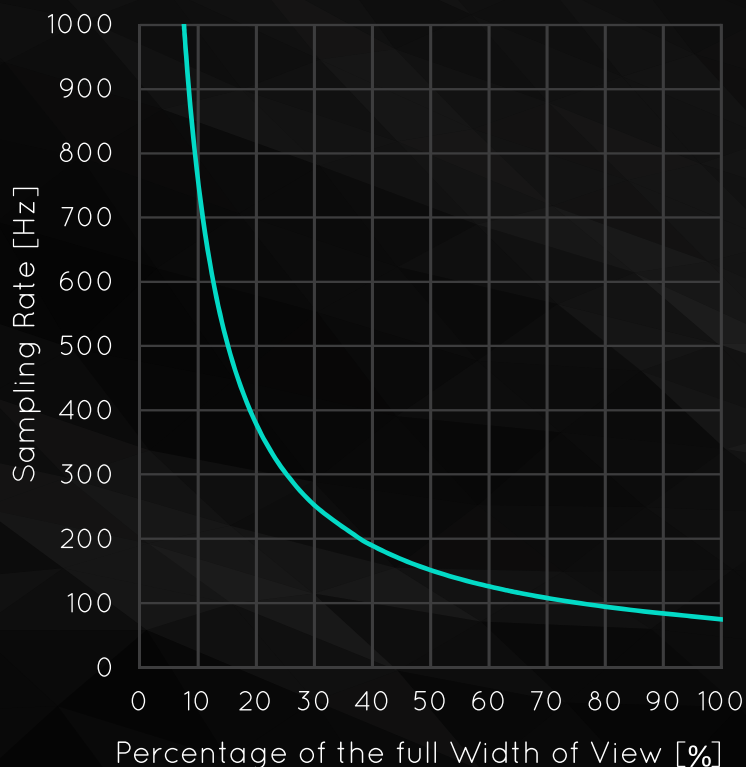
ONE-M5

Specification

- Single camera resolution: 5 MPx
- 2/3" sensor size
- CMOS sensor
- 3.45 um pixel size
- USB 3.0 interface
- 75 Hz at full resolution
- C-Mount lens mounting
- S-Series lens recommended

ISO 9513	Field of View [mm]						Working Distance [mm]				
	ONE1-M5		ONE2-M5		ONE3-M5		Lens Focal Length				
	Height	Width	Height	Width	Height	Width	12mm	16mm	25mm	35mm	50mm
Class 0.5	130	109	2x130	109	3x130	109	156	213	357	520	710
Class 1	260	218	520	218	760	218	335	459	737	1054	1480
Class 2	520	435	1040	435	1500	435	693	950	1498	2123	3020

Separate Fields of View; for Joined mode check ONE-M9

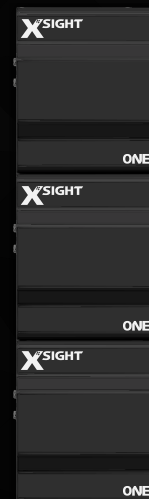Additional lighting may be needed
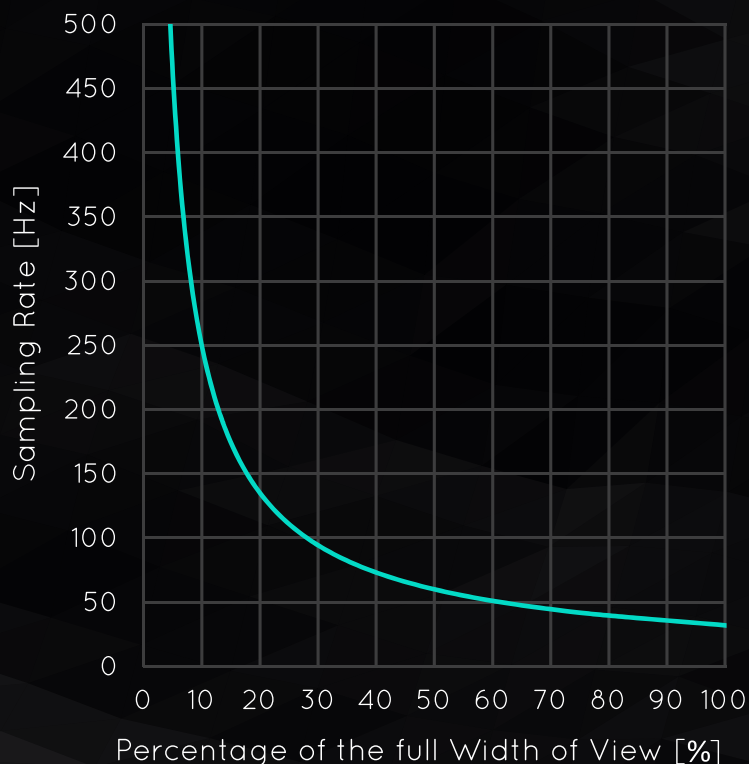
ONE1-M5

ONE2-M5

ONE3-M5

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ONE-M9

Specification

- Single camera resolution: 9 MPx
- 1" sensor size
- CMOS sensor
- 3.45 um pixel size
- USB 3.0 interface
- 32 Hz at full resolution
- C-Mount lens mounting
- H-Series lens recommended

Sampling Rate [Hz] vs Percentage of the full Width of View [%]

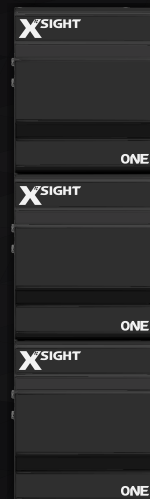| ISO 9513	Field of View [mm]						Working Distance [mm]				
	ONE1-M9		ONE2-M9		ONE3-M9		Lens Focal Length				
	Height	Width	Height	Width	Height	Width	12mm	16mm	25mm	35mm	50mm
Class 0.5	220	116	420	116	620	116	169	233	378	519	720
Class 1	440	232	840	262	1240	262	364	494	758	1063	1485
Class 2	880	464	1680	464	2480	464	748	1017	1519	2152	3055

Additional lighting may be needed

ONE1-M9

ONE2-M9

ONE3-M9

STEREO ONE

A 3D expansion of X-Sight's top-selling industrial measuring device provides the opportunity to measure specimens with complex geometry or specimens displaying large out-of-plane displacement during the test.

Suitable mainly as an auxiliary sensor for testing machines. As such, it can be fixed and calibrated without re-setting for longer periods of time.

Any couple of standard ONE video extensometers can be paired and converted into a 3D system by using the dual mode and the appropriate 3D DIC software modules. The result is a flexible and adjustable system suitable for various applications and measurements.

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watch our videos at

www.xsight.eu

or contact us at

info@xsight.eu