XL Vu VideoProbe*

Inspection Technologies

GE's Versatile Video Borescope

The XL Vu VideoProbe from GE's Measurement & Control business is equipped to handle a wide variety of remote visual inspection needs.

Versatility Packed with Features

- StereoProbe* and Comparison indication measurement

- Servomotor All-Way* Probe articulation

- Sealed housings for Dust and Water ingress protection to IP55

- NEW 4.0 mm optics set for improved image quality and far focus general inspection.

- Transflective sunlight readable LCD

- Image and video capture in Full VGA resolution

- Integrated Temperature Warning system

- Probe operates up to 100°C to gain access faster in high temperature applications where cooling time is needed

- Automated inspection reporting and data tagging software (Menu Directed Inspection)

- Live on screen Tip Map aids inspectors in guiding the tip during inspection. A grid shows the tip direction and helps inspectors maintain orientation or better navigation.

- 4 GB Internal Flash memory

- 2 USB® 2.0 ports, VGA video out, headset/microphone port

- Two or four-hour Li-Ion battery

- Full tip optic interchangeability with secure double threads

- Shipping and storage case with integral probe reel included with system

Portability

Our XL Vu VideoProbe system provides inspectors with unparalleled access—without a bulky base unit. Weighing as little as 1.77 kg (3.90 lb), the XL Vu VideoProbe system can easily "view anywhere."

Image Quality

GE's XL Vu borescope utilizes LED illumination to display excellent image quality. You can save clear, accurate still images and motion video to the internal flash memory or removable USB ThumbDrive™.

Standard shipping/storage case

Magic clamp (optional)

4 hour battery (optional)

Optical tip case

Included battery charger/ac adapter

Tube gripper (optional)

ThumbDrive®

Technical Specifications

Operating Environment

Tip Operating Temp:	-25°C to 100°C (-13°F to 212°F)
	Reduced articulation below 0°C (32°F)
System Operating Temp:	-20°C to 46°C (-4°F to 115°F)
	LCD requires warm-up period below 0°C (32°F)
Storage Temperature:	-25°C to 60°C (-13°F to 140°F)
Relative Humidity:	95% max, non-condensing
Waterproof:	Insertion tube and tip to 14.7 psi (1 bar, 10.2 m of H_2O, 33.5 ft of H_2O)
Environmental:	IP55 Ingress Protection

System

Case Dimensions:	48.8 x 38.6 x 18.5 cm (19.2 x 15.2 x 7.3 in)
System Weight	
In Case:	6.50 kg (14.30 lb)
Without Case:	1.73 kg (3.80 lb)
Power (Lithium Ion Battery):	8.4 V, 38 Wh (2 hour)
	8.4 V, 75 Wh (4 hour)
Power Supply:	**AC Input:** 100-240 VAC, 50-60 Hz, 1.5 A Max
	DC Output: 9.5 V, 6.0 A
Construction:	Polycarbonate housings with integrated Versalon™(JP) bumpers
Dimensions:	9.53 x 13.34 x 34.29 cm (3.75 x 5.25 x 13.50 in)
LCD Monitor:	Integrated transflective 9.40 cm (3.70 in) active matrix VGA color LCD with XpertBright, 640 x 480 resolution
Joystick Control:	360° All-Way tip articulation with XpertSteer, bump gesture, menu access and navigation
Button Set:	Access user functions, measurement and digital functions
Audio:	Integrated 2.5 mm headset/microphone jack
Internal Memory:	4 GB Flash memory
Data I/O Ports:	Two USB® 2.0 ports
Video Port:	VGA Video Out
Brightness Control:	Auto and Variable
Illumination Type:	White LED
Long Exposure:	Via auto and manual mode
White Balance:	Factory default or user defined

Standards Compliance and Classifications

MIL-STD-810G	Tested to United States Department of Defense Environment Tests Sections 506.5, 507.5, 509.5, 510.5, 511.5, 514.6, 516.6, 521.3
MIL-STD-461F	Tested to United States Department of Defense Electromagnetic Interference RS103 - ABOVE DECK
Standards Compliance	Group 1, Class A: EN61326-1
	UL, IEC, EN CSA-C22.2:61010-1
	UN/DOT T1-T8
IP Rating	Tested to IP55

Camera

4.0 mm (0.157 in) Diameter Probes

Image Sensor:	1/10 inch Color SUPER HAD CCD camera
Pixel Count:	290,000 pixels
Housing:	Titanium

6.1 mm (0.242 in) and 8.4 mm (0.331 in) Diameter Probes

Image Sensor:	1/6 inch Color SUPER HAD™ CCD camera
Pixel Count:	440,000 pixels
Housing:	Titanium

Software

Operating System:	Real-time multi-tasking operating system
User Interface:	Simple drop-down menu-driven operation
	Menu navigation using articulation joystick
File Manager:	Embedded file manager software supporting: File & Folder creation, naming, deleting Store to internal Flash (C:\) or USB ThumbDrive Copy between USB and C:\
Measurements:	StereoProbe and Comparison
MDI Software (optional):	Provides user defined guided inspection Creates DICONDE compatible inspection files
	Creates MS Word® compatible inspection reports
Audio Data:	PC compatible (.AAC) file format
Image Control:	Invert, Zoom (5X digital)
	Image Capture and Recall
Digital Zoom:	Continuous (5.0X)
Image Formats:	Bitmap (.BMP), JPEG (.JPG)
Video Format:	MPEG 4
Text Annotation:	Built-in full screen text overlay generator
	Supports international language character sets 100 text line capacity
Graphic Annotation:	User placement of arrows
Articulation Control:	"Steer & Stay" articulation lock/fine articulation Tip "Home" return to neutral forward-tip orientation User-selectable fine or coarse control XpertSteer probe articulation offers quick steering responsiveness for tight probe control – bump steering enables slight adjustments to probe position
Software Updates:	Field updateable via USB ThumbDrive
Languages:	English, Spanish, French, German, Italian, Russian, Japanese, Korean, Portuguese, Chinese, Polish

Insertion Tube Length and Diameter Options

CAMERA DIAMETER	INSERTION TUBE WORKING LENGTH						
4.0 mm (0.157 in)	2.0 m (6.6 ft)	3.0 m (9.8 ft)					
6.1 mm (0.242 in)	2.0 m (6.6 ft)	3.0 m (9.8 ft)	4.5 m (14.8 ft)	6.0 m (19.7 ft)	8.0 m (26.2 ft)		
8.4 mm (0.331 in)	2.0 m (6.6 ft)	3.0 m (9.8 ft)	4.5 m (14.8 ft)	6.0 m (19.7 ft)	8.0 m (26.2 ft)	10.0 m (32.8 ft)	

Tip Articulation

Insertion Tube Length	Straight Tube
2.0, 3.0 or 4.5 m	Up/Down – 160° min, Left/Right – 160° min
6.0 m	Up/Down – 140° min, Left/Right – 140° min
8.0 m, 10.0 m	Up/Down – 120° min, Left/Right – 120° min

Note: Typical articulation exceeds minimum specifications

Tip Optics

Tip View (DOV)	Tip Color		Field of View (FOV)[1]	Depth of Field (DOF)		4.0 mm Optical Tip Part #	6.1 mm Optical Tip Part #	8.4 mm Optical Tip Part #
Standard Tips								
FORWARD	NONE	⊠	80°	35 mm–infinity	(1.38 in–infinity)	T4080FF		
FORWARD	BLACK	●	115°	4 mm–infinity	(0.16 in–infinity)	T40115FN		
FORWARD	NONE	⊠	50°	50 mm–infinity	(1.97 in–infinity)		XLG3T6150FF[2]	
FORWARD	WHITE	○	50°	12–200 mm	(0.47–7.87 in)		XLG3T6150FG	
FORWARD	ORANGE	●	80°	3–20 mm	(0.12–0.79 in)		XLG3T6180FN	
FORWARD	YELLOW	●	90°	20 mm–infinity	(0.79 in–infinity)		XLG3T6190FF	
FORWARD	BLACK	●	120°	5–120 mm	(0.20–4.72 in)		XLG3T61120FG	
FORWARD	BLACK	●	100°	5–120 mm	(0.20–4.72 in)			
FORWARD OBLIQUE	PURPLE	●	50°	12–80 mm	(0.47–3.15 in)		XLG3T6150FB	
FORWARD	BLACK	●	120°	5–200 mm	(0.20–7.87 in)			XLG3T84120FN
FORWARD	NONE	⊠	40°	250 mm–infinity	(9.84 in–infinity)			XLG3T8440FF[2]
FORWARD	WHITE	○	40°	80–500 mm	(3.15–19.68 in)			XLG3T8440FG
FORWARD	YELLOW	●	80°	25–500 mm	(0.98–19.68 in)			XLG3T8480FG
SIDE	BLUE	●	120°	6 mm–infinity	(0.24 in–infinity)	T40120SF		
SIDE	RED	●	115°	1–30 mm	(0.04–0.18 in)	T40115SN		
SIDE	BROWN	●	50°	45 mm–infinity	(1.77 in–infinity)		XLG3T6150SF	
SIDE	GREEN	●	50°	9–160 mm	(0.35–6.30 in)		XLG3T6150SG	
SIDE	BLUE	●	120°	4–100 mm	(0.16–3.94 in)		XLG3T61120SG	
SIDE	BLUE	●	100°	4–100 mm	(0.16–3.94 in)			
SIDE	RED	●	80°	1–20 mm	(0.04–0.79 in)		XLG3T6180SN	
SIDE	GREEN	●	80°	18 mm	(0.71 in–infinity)			
SIDE	BLUE	●	80°	5 mm	(0.20 in–infinity)			
SIDE	BROWN	●	40°	250 mm–infinity	(9.84 in–infinity)			XLG3T8440SF[2]
SIDE	GREEN	●	80°	25–500 mm	(0.98–19.68 in)			XLG3T8480SG
SIDE	BLUE	●	120°	4–200 mm	(0.16–7.87 in)			XLG3T84120SN
StereoProbe Measurement Tips								
FORWARD	BLACK	●	55°/55°	5 mm–infinity	(0.2 in–infinity)	TM405555FG		
FORWARD	BLACK	●	60°/60°	4–80 mm	(0.16–3.15 in)		XLG3TM616060FG	
FORWARD	BLACK	●	60°/60°	4–50 mm	(0.16–1.97 in)			XLG3TM846060FG
SIDE	BLUE	●	55°/55°	4 mm–infinity	(0.16 in–infinity)	TM405555SG		
SIDE	BLUE	●	45°/45°	2–50 mm	(0.08–1.97 in.)			
SIDE	BLUE	●	50°/50°	2–50 mm	(0.08–1.97 in)		XLG3TM615050SG	
SIDE	BLUE	●	60°/60°	4–80 mm	(0.16–3.15 in)			
SIDE	BLUE	●	60°/60°	4–50 mm	(0.16–1.97 in)			XLG3TM846060SG

[1] FOV is specified diagonally.
[2] Indicates tips with maximum brightness.

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