

# XL Detect and XL Detect + VideoProbes

Expect better inspections.



Your Complete Source for Testing Equipment Since 1969! www.BergEng.com Berg Engineering & Sales Company, Inc. 1-847-577-3980 info@BergEng.com With the XL Detect and XL Detect+ VideoProbes, it's all in the details. Improve accuracy and speed up workflow with crisp image quality, plus an upgraded 5" LCD screen on the XL Detect+. Lower your maintenance costs with rugged durability. And get expert support from GE anywhere, anytime. All in a lightweight, portable, and easy-to-use device. The high-end capabilities you need—without the high price.

### Be confident in your results.

Complete fast, precise inspections with superior image quality, plus a 5" LCD screen and 3X brighter display on the XL Detect+.

### Cut down on costs.

Lower your maintenance spending with durability you can trust, even in the harshest inspection environments.

### Stay flexible.

At just 4.3 lbs., the device is lightweight and portable, featuring a rugged carrying case with integrated insertion tube storage reel.

### Learn quickly.

The intuitive interface includes Menu Directed Inspection (MDI) 1.1, an application to guide users through inspections and organize results for simpler reporting

### Experience true peace of mind.

Get readily available assistance from GE experts, wherever you are.

### Now with a 5" LCD screen for clear-cut inspections.

The new XL Detect+ display is 85% larger, with crystal clear image quality unmatched in the industry. That means a simpler interface, less eyestrain on long inspections, and more accurate images right on your device. Because when you can see clearly, you improve POD, speed up your workflow, and deliver results with confidence.



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## **Technical Specifications**

#### **Operating Environment**

Operating Environm	nent	Standards Compliance and Classifications			
Tip Operating Temp:	-25°C to 100°C (-13°F to 212°F) Reduced articulation below 0°C (32°F)	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		
System Operating Temp:	-20°C to 46°C (-4°F to 115°F) LCD requires warm-up period below 0°C (32°F)	MIL-STD-461F	XL Detect: Tested to United States Department of Defense Electromagnetic Interference RS103 - ABOVE DECK		
Storage Temperature:	-25°C to 60°C (-13°F to 140°F)		XL Detect+: Available upon request		
Relative Humidity:	95% max, non-condensing	Standards Compliance	Group 1, Class A: EN61326-1 UL, IEC, EN CSA-C22.2:61010-1		
Waterproof:	Insertion tube and tip to 14.7 psi (1 bar, 10.2 m of H2 O, 33.5 ft of H2 O)		UN/DOTT1-T8		
Environmental:	XL Detect: Tested to IP55 XL Detect+: Tested to IP65	IP Rating	XL Detect: Tested to IP55 XL Detect+: Tested to IP65		
System		Camera			
Case Dimensions:	48.8 x 38.6 x 18.5 cm (19.2 x 15.2 x 17.3 in)	4.0 mm (0.157 in) Diameter Probes			
System Weight:	In Case: XL Detect: 6.50 kg (14.30 lb) XL Detect+: 6.74 kg (14.87 lb) Without Case:	Image Sensor:	1/10 inch Color SUPER HAD CCD camera		
		Pixel Count:	290,000 pixels		
		Housing:	Titanium		
	XL Detect: 1.77 kg (3.80 lb) XL Detect+: 1.98 kg (4.37 lb)	6.1 mm (0.242 in) and 8.4 mm (0.331 in) Diameter Probes			
Power (Lithium Ion Battery)	8.4 V, 38 Wh (2 hour) 8.4 V, 75 Wh (4 hour)	Image Sensor:	1/6 inch Color SUPER HAD™ CCD camera		
Power Supply:	AC Input: 100-240 VAC, 50-60 Hz, 1.5 A Max DC	Pixel Count:	440,000 pixels		
	Output: 9.5 V, 6.0 A	Housing:	Titanium		
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)	Software			
LCD Monitor:	XL Detect: Integrated transflective 9.40 cm (3.70 in) active matrix VGA color LCD with XpertBright, 640 x 480 resolution XL Detect+: Integrated 12.7 cm (5.0) active matrix VGA color LCD, Transmissive display.	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:		
Joystick Control:	360 All-Way Tip articulation, menu access and navigation		File & Folder creation, naming, deleting Store to internal Flash (C:\) or USB ThumbDrive Copy between USB and C:\		
Button Set:	Access user functions, measurement and digital functions	MDI Software (optional):	Provides user defined guided inspection Creates DICONDE compatible inspection files Creates MS		
Audio:	Integrated 2.5 mm headset/microphone jack		Word <sup>®</sup> compatible inspection reports		
Internal Memory:	XL Detect: 1 GB Flash memory	Audio Data:	PC compatible (.AAC) file format		
Data I/O Ports:	XL Detect+: 4 GB Flash memory One USB® 2.0 port	Image Control:	Invert, Zoom (5X digital) Image Capture and Recall		
Video Port:	VGA Video Out	Digital Zoom:	Continuous (5.0X)		
Brightness Control:	Auto and Variable	Image Formats:	Bitmap (.BMP), JPEG (.JPG)		
Illumination Type:	White LED	Video Format:	MPEG 4		
		Text Annotation:	Built-in full screen text overlay generator Supports international language character sets 100 text line		
Long Exposure: White Balance:	Via auto and manual mode Factory default or user defined		capacity		
white balance.		Graphic Annotation:	User placement of arrows		
		Articulation Control:	"Steer & Stay" articulation lock/fine articulation Tip "Home" return to neutral forward-tip orientation		
		Software Updates:	Field updateable via USB ThumbDrive		

**Standards Compliance and Classifications** 

### Insertion Tube Length and Diameter Options

CAMERA DIAMETER	INSERTION TUBE \	<b>WORKING LENGTH</b>			
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)	
8.4 mm (0.331 in)		3.0 m (9.8 ft)			10.0 m (32.8 ft)

Languages:



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English, Spanish, French, German, Italian, Russian, Japa-

nese, Korean, Portuguese, Chinese, Polish

### **Tip Articulation**

Insertion Tube Length	Straight Tube
2.0, 3.0 or 4.5 m	Up/Down – 140° min, Left/Right – 140° min
6.0 m	Up/Down – 120° min, Left/Right – 120° min
10.0 m	Up/Down – 100° min, Left/Right – 100° min

Note: Typical articulation exceeds minimum specifications

#### **Tip Optics**

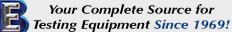
Tip View (DOV)	Tip Color	Field of View (FOV) <sup>(1)</sup>	Depth of Field (DOF)		4.0 mm Optical Tip Part #	6.1 mm Optical Tip Part #	8.4 mm Optical Tip Part #
Standard Tip	os						
FORWARD	NONE 🖂	80°	35 mm–infinity	(1.38 in-infinity)	T4080FF		
FORWARD	BLACK	115°	4 mm-infinity	(0.16 in-infinity)	T40115FN		
FORWARD	NONE 🖂	50°	50 mm–infinity	(1.97 in-infinity)		XLG3T6150FF <sup>(2)</sup>	
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 <sup>(2)</sup>
FORWARD	WHITE	40°	80-500 mm	(3.15–19.68 in)			XLG3T8440FG
FORWARD	YELLOW 😑	80°	25-500 mm	(0.98-19.68 in)			XLG3T8480FG
FORWARD	GRAY 🔵	120°	20-infinity	(0.79"-infinity)		T61120FF	
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 <sup>(2)</sup>
SIDE	GREEN 🔵	80°	25-500 mm	(0.98-19.68 in)			XLG3T8480SG
SIDE	BLUE 🔵	120°	4-200 mm	(0.16-7.87 in)			XLG3T84120S

<sup>(1)</sup>FOV is specified diagonally.

<sup>(2)</sup>Indicates tips with maximum brightness.



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