

GE
Sensing & Inspection Technologies

XLG3™ VideoProbe®

Remote Visual Inspection

Productivity Tool

From GE Sensing & Inspection Technologies, the world's leader in the development of Remote Visual Inspection (RVI) equipment, comes a revolutionary new video borescope – the XLG3 VideoProbe system.

GE Sensing & Inspection Technologies' power tool for improving inspection productivity.



Features

- Extra-bright, high-resolution LCD screen and high-output illumination deliver sharp, clear images
- Dual-purpose shipping and operating case
- Lightweight remote control (optional)
- Powerful computing platform for data management and worldwide connectivity



QuickChange™ Probes

With its interchangeable QuickChange probes, the XLG3™ system quickly reconfigures probe diameter and length for maximum productivity. Probes come in 3.9 mm, 5.0 mm, 6.1 mm, and 8.4 mm diameters and are built for increased durability with:

- Titanium camera head that is 8 times stronger than older designs
- Bending neck seams that are laser-weld to strengthen critical joints
- 6.1 mm and 8.4 mm probes are built with a double tungsten braid insertion tube for added crush resistance



System

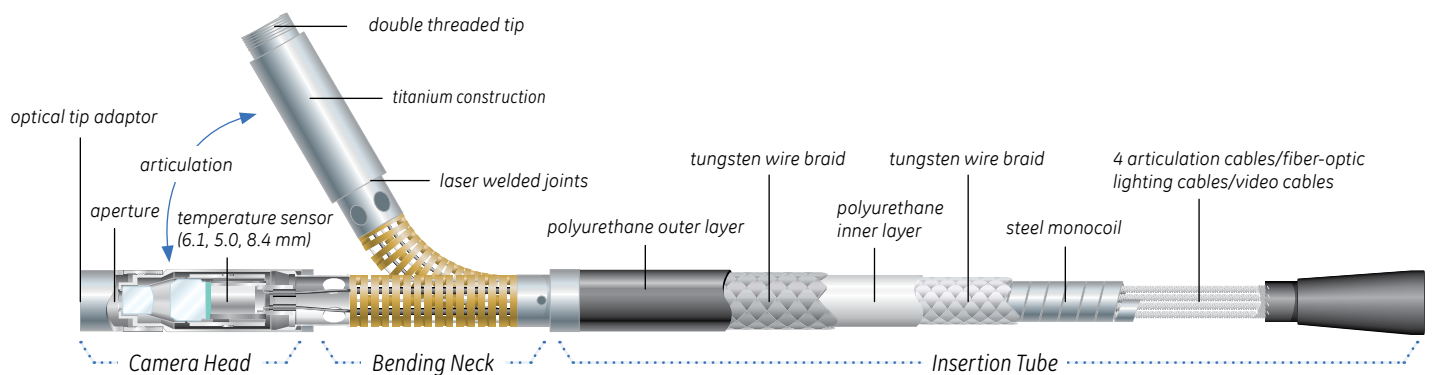
The base unit is a portable workstation for inspection data management, plus light source and storage reel for the probe. The unit features:

- 4GB (standard) internal CompactFlash® card
- 3 USB 2.0 ports
- 10/100 Ethernet port for PC with optional Internet connection
- Optional battery/UPS pack in one- or two-hour capacities
- One CompactFlash card slot that accept memory
- User configurable NTSC/PAL video format selection
- Optional internal Wi-Fi card



Technical Specifications

Insertion Tube



Note: Illustration is not drawn to scale.

CAMERA DIAMETER	INSERTION TUBE WORKING LENGTH						
3.9 mm (0.154 in.)	2.0 m (6.6 ft)	3.0 m (9.8 ft)					
5.0 mm (0.197 in.)	2.0 m (6.6 ft)	3.0 m (9.8 ft)	4.5 m (14.8 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)	9.6 m (31.5 ft)	

Technical Specifications

System

Case Dimensions:	
Standard:	54.6 x 49.5 x 32.0 cm (21.5 x 19.5 x 12.6 in)
Tall:	54.6 x 60.9 x 32.0 cm (21.5 x 24 x 12.6 in)
Weight:	
In Case:	21.8 kg (48 lb)
Without Case:	10.9 kg (24 lb)

QuickChange™ Probes

6.1 mm (0.242 in), 5.0 mm (0.197 in) and 8.4 mm (0.331 in) Diameter Probes

Image Sensor:	1/6" Color SUPER HAD CCD®
Pixel Count:	440,000 pixels
Temperature Sensor:	Integrated Temperature Warning System
Camera Housing:	Titanium
Articulation:	360° All-Way®
Tip Optics:	Double threaded attachment

3.9 mm (0.154 in) Diameter Probes

Image Sensor:	1/10" Color, SUPER HAD CCD
Pixel Count:	290,000 pixels
Camera Housing:	Titanium
Articulation:	360° All-Way
Tip Optics:	Double threaded attachment

Handset

Dimensions:	39 x 18 x 13 cm (15.4 x 7.1 x 5.1 in)
Weight:	1.81 kg (3.98 lb)
Construction:	Polycarbonate housing with integrated elastomer bumpers
LCD:	16.3 cm (6.4 in) diagonal, 16 x 9 aspect ratio, 800 x 480 pixels, wide VGA
LCD Brightness:	380 nits (cd/m ²)
Power Tube:	2.4 m (8 ft) long
User Controls:	Joystick and complete button function set
Microphone:	Built-in microphone for audio annotation located at the top center of the handset

Base Unit

Dimensions:	44 x 22 x 35 cm (17.3 x 8.7 x 13.8 in)
Weight:	7.21 kg (15.90 lb)
Construction:	Aluminum chassis with polyurethane bumpers
System CPU:	Intel Pentium® M
Video Processors:	Multiple digital signal processors
Brightness Control:	Automatic and variable, adjustable auto gain and exposure
System Memory:	Internal CompactFlash® card, 4GB (standard)
Lamp Type:	75W High Intensity Discharge (HID)
Lamp Output:	4300 Lumens
Lamp Life:	1000 hour median
Keyboard Input:	USB keyboard with built-in trackball
Video Outputs:	Switchable NTSC/PAL S-Video, Standard 15-pin PC video connector
Video Input:	Auto detecting NTSC/PAL S-Video
USB:	Three external USB 2.0 ports
Ethernet:	Integrated 10/100 Ethernet port
CompactFlash:	One CompactFlash card (Type II) slot
AC Input:	AC Nominal input: 100 to 240 V, 50 to 60 Hz; 115 V, 400 Hz; 275 W max
AC Output:	100 W max; IEC320-2-2 Type F connector
AC Fuse:	6.3A, 250V, fast acting
DC Input:	11 to 15 VDC; nominal 12 VDC; 150 W max
DC Fuse:	20A, 600 VDC, fast acting
Audio Output Connectors:	Built-in front panel speaker, 3.5 mm stereo line level out, 2V RMS max, 3.5 mm stereo headphone
Audio Input Connector:	3.5 mm microphone

Operating Environment

System Operating Temp:	-4° to 115°F (-20° to 46°C) LCD requires warm-up period below 32°F (0°C)
Tip Operating Temp:	-13° to 176°F (-25° to 80°C) Reduced articulation below 32°F (0°C)
Storage Temperature:	-13° to 140°F (-25° to 60°C)
Relative Humidity:	95% max, non condensing
Waterproof:	Insertion tubes are watertight to 1 bar (14.5 psig, 10.2 m [33.5 ft] of H ₂ O)
Hazardous Environments:	Not rated for use in hazardous environments

Software

Operating System:	Multitasking with desktop software options
User Interface:	Drop-down menu driven operation, joystick, and keypad
File Manager:	File and folder creation, naming, copying and deleting
Audio Data:	PC compatible, 15 second files (WAV or MP3 format). PCM audio with MPEG2 video recordings
Image Controls:	Adjustable brightness, 1/10,000 sec to 12 sec exposure. Left/Right invert for side-view tip correction. Freeze frame, live/still Inverse+ enhancement, side-by-side split screen
Digital Zoom:	1X to 3X - Continuous and 5-level stepped
User Available Memory:	100 MB internal, user-supplied external
Annotation:	Text and arrow overlays and custom logos
Articulation Controls:	360° All-Way® steering, Steer-and-Stay™, Home
Lamp Control:	On/Off, menu-controlled
Software Updates:	Field upgradeable via removable media
Temperature Warning:	Integrated camera and base unit temperature warning systems
DVD writing:	DVD+R, DVD-R, still images, audio clips, MPEG2 video and PCM audio real-time recording

Languages

User selectable language for on-screen displays. Select Chinese, Czech, English, French, Japanese, Spanish, Russian, German, Italian, Portuguese, Swedish, or factory supplied custom language.

Tip Articulation

Length	Straight Tube
2.0 m, 3.0 m, and 4.5 m	Up/Down - 140° min, Left/Right - 140° min
6.0 m	Up/Down - 130° min, Left/Right - 130° min
8.0 m	Up/Down - 120° min, Left/Right - 120° min
9.6 m	Up/Down - 110° min, Left/Right - 110° min

Note: Typical articulation exceeds minimum specifications

Measurement (Supported Features)

Feature	ShadowProbe®	StereoProbe®	Comparison
Length/Distance	■	■	■
Depth	■	■	
Point-to-Line	■	■	■
Non-perpendicular Length	■	■	
Area	■	■	■
Multi-Segment Length	■	■	■
Circle Gauge	■		■
3x Zoom Windows	■	■	■
5 Measurements per Image	■	■	■

Technical Specifications

Tip Optics

Tip View (DOV)	Tip Color	Field of View (FOV)*	Depth of Field (DOF)	3.9 mm Optical Tip Part #	5.0 mm Optical Tip Part #	6.1 mm Optical Tip Part #	8.4 mm Optical Tip Part #
Standard Tips							
FORWARD	NONE ☒	80°	6–80 mm (0.24–3.15 in)	PXT480FG			
FORWARD	ORANGE ●	90°	3–40 mm (0.12–1.57 in)	PXT490FN			
FORWARD	NONE ☒	50°	50 mm (1.97 in)–infinity		PXT550FF	XLG3T6150FF	
FORWARD	WHITE ○	50°	12–200 mm (0.47–7.87 in)		PXT550FG	XLG3T6150FG	
FORWARD	ORANGE ●	80°	3–20 mm (0.12–0.79 in)		PXT580FN	XLG3T6180FN	
FORWARD	YELLOW ●	90°	20 mm (0.79 in)–infinity			XLG3T6190FF	
FORWARD	BLACK ●	100°	5–120 mm (0.20–4.72 in)		PXT5100FG		
FORWARD	BLACK ●	120°	5–120 mm (0.20–4.72 in)			XLG3T61120FG	
FORWARD OBLIQUE	PURPLE ●	50°	12–80 mm (0.47–3.15 in)			XLG3T6150FB	
FORWARD	NONE ☒	40°	250 mm (9.84 in)–infinity				XLG3T8440FF**
FORWARD	GOLD ●	20°	500 mm (19.68 in)–infinity				XLG3T8420FF
FORWARD	YELLOW ●	80°	25–500 mm (0.98–19.68 in)				XLG3T8480FG
FORWARD	BLACK ●	120°	5–200 mm (0.20–7.87 in)				XLG3T84120FN
SIDE	BROWN ●	80°	4–80 mm (0.16–3.15 in)	PXT480SG			
SIDE	RED ●	90°	2–16 mm (0.08–0.63 in)	PXT490SN			
SIDE	BROWN ●	50°	45 mm (1.77 in.)–infinity			XLG3T6150SF	
SIDE	GREEN ●	50°	9–160 mm (0.35–6.30 in)		PXT550SG	XLG3T6150SG	
SIDE	BLUE ●	120°	4–100 mm (0.16–3.94 in)			XLG3T61120SG	
SIDE	BLUE ●	100°	4–100 mm (0.16–3.94 in)		PXT5100SG		
SIDE	RED ●	80°	1–20 mm (0.04–0.79 in)		PXT580SN	XLG3T6180SN	
SIDE	BROWN ●	40°	250 mm (9.84 in)–infinity				XLG3T8440SF**
SIDE	GREEN ●	80°	25–500 mm (0.98–19.68 in)				XLG3T8480SG
SIDE	BLUE ●	120°	4–200 mm (0.16–7.87 in)				XLG3T84120SN
ShadowProbe® Measurement Tips							
FORWARD	WHITE ○	50°	12–30 mm (0.47–1.18 in)			XLG3TM6150FG	
SIDE	BLUE ●	50°	7–24 mm (0.28–0.94 in)			XLG3TM6150SG	
StereoProbe® Measurement Tips							
FORWARD	BLACK ●	50°/50°	5–45 mm (0.20–1.77 in)	PXTM45050FG			
FORWARD	BLACK ●	60°/60°	4–80 mm (0.16–3.15 in)		PXTM56060FG		
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 ●	50°/50°	4–45 mm (0.16–1.77 in)	PXTM45050SG			
SIDE	BLUE ●	45°/45°	2–50 mm (0.08–1.97 in)		PXTM54545SG		
SIDE	BLUE ●	50°/50°	2–50 mm (0.08–1.97 in)			XLG3TM615050SG	
SIDE	BLUE ●	60°/60°	4–50 mm (0.16–1.97 in)				XLG3TM846060SG

*FOV is specified diagonally.

**Indicates tips with maximum brightness.



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