

Everest XLG3 VideoProbe®

Remote Visual Inspection

Productivity Tool

From GE 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 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

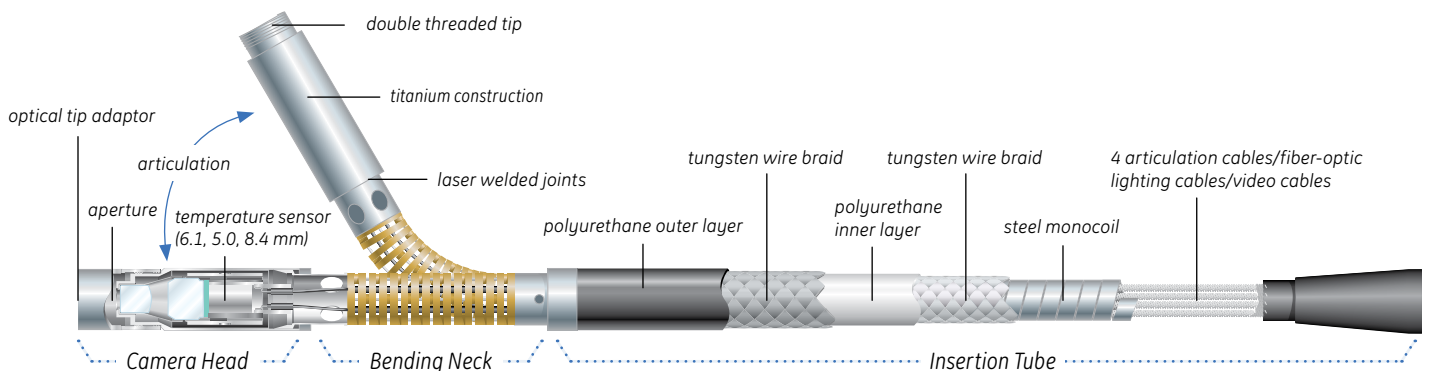
The base unit is a portable workstation for inspection data management, plus light source and storage reel for the probe. The unit features:

- 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
- Two PC card slots that accept memory and communication cards
- User configurable NTSC/PAL video format selection



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 lbs.)
Without Case:	10.9 kg (24 lbs.)

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 lbs.)
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 lbs.)
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
PCMCIA:	Two 32-bit PC card slots
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	YELLOW ●	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–infinity (0.79 in.–infinity)			XLG3T6190FF	
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.)		PXT5100SG	XLG3T61120SG	
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.



GE Inspection Technologies: productivity through inspection solutions

GE Inspection Technologies provides technology-driven inspection solutions that deliver productivity, quality and safety. We design, manufacture and service ultrasonic, remote visual, radiographic and eddy current equipment and systems. We offer specialized solutions that will help you improve productivity in your applications in the aerospace, power generation, oil & gas, automotive or metals industries.

www.ge.com/inspectiontechnologies