

6.2 mm Ø VideoProbe[®] with Working Channel

Remote Visual Inspection

Advanced, Modular, Portable

The 6.2 mm Ø VideoProbe system features an internal working channel and a full suite of working tools making it the most complete FOD retrieval system in the industry.





Retrieval Tools for 6.2 mm Ø VideoProbe® (Shown actual size)

Features

- Internal working tool channel
- 9 different working tools available
- Available in XL PRO™ and XL PRO Plus models
- CompactFlash® removable storage media – XL PRO Plus
- USB Streaming digital video output – XL PRO Plus
- Over two hours of MPEG2 full-motion audio/video recording and playback – XL PRO Plus
- Complete portability with AC, DC or battery operation
- Integrated viewing, recording, measuring, comparing and playback
- On-screen time/date, articulation position and character generation
- On-screen time/date, articulation position and character generation



All-Way® Probe Tip Articulation



With Mini Magic Arm

Probes

From the world's smallest video borescope with All-Way articulation and measurement capability (the 3.9 mm Ø) to the 7.3 mm Ø VideoProbe® XL PRO system with an internal working channel, our interchangeable probes are built to withstand almost any environment. Ruggedly constructed, the probes are protected by:

- Titanium camera head
- Quad-wall insertion tube construction
- Tungsten braid over entire insertion tube and bending neck
- Force-limited, servo-motor articulation

Hand-Piece

The ergonomic hand-piece provides one-handed operation with intuitive joystick articulation, large control buttons and a high-resolution color LCD.

The innovative Hand-Piece features:

- Joystick for All-Way articulation and menu control
- Shock-mounted LCD monitor
- Integrated microphone
- Insertion tube torsional strain-relief
- Impact-absorbing rubber bumpers

Technical Specifications

System

Case Dimensions: 66.0 x 55.9 x 26.7 cm (26.0 x 22.0 x 10.5 in.)
Weight: In case 15.9 kg (35.0 lbs.), Without case 7.7 kg (17.0 lbs.)
Power Supply: **AC Power:** Nominal input: 100-240 V (min 90 V, max 250 V);
 50-400 Hz; 150 W max, 2 A max
DC Power: Nominal input: 11-14 V, 11 A max
 +28 VDC via accessory adapter

Camera

6.2 mm Ø VideoProbe® System
Image Sensor: 1/10 in. Color SUPER HAD™ CCD
Pixel Count: 250,000 pixels NTSC; 290,000 pixels PAL
Long Exposure: Automatic or Manual (34 msec to 8 seconds)
White Balance: Factory default or user defined
Housing: Titanium

Processor/Light Source

Common Specifications

Dimensions: 27.9 W x 29.5 D x 14.0 H cm (11.0 x 11.6 x 5.5 in.)
Weight: 5.4 kg (12.0 lbs.)
Construction: Aluminum chassis with polyurethane bumpers
Processor: 32 bit Pentium®-class embedded computer
Brightness Control: Automatic and Variable
Lamp Type: 50 W Metal-Halide Arc
Lamp Output: 2600 lumens at 5885K
Lamp Life: 1000 hrs., median
Keyboard Input: PS/2 style keyboard connector
Audio Speaker: Built-in front panel speaker with volume control knob
Audio Out Jack: RCA style connector, line-level audio out
Video Input: S-Video and Composite BNC (XL PRO only) inputs
Video Out: S-Video and Composite BNC
Remote Control: RS-232, DB-9F Connector

XL PRO™ Plus Specifications

Memory: 64MB internal Flash memory
Disk Drives: CompactFlash®, Type I, accepts all memory sizes
Still Image Storage: .BMP uncompressed – 900 KB typical file size
 .JPG Super High Quality – 200 KB typical file size
 .JPG High Quality – 90 KB typical file size
 .JPG Low – 30 KB typical file size
Video Recording: MPEG2: High and Low Quality Settings, Up to 42 minutes recording on High w/1GB CF card
 MPEG1: High, Medium and Low Quality Settings, Up to 92 minutes recording on Med w/1 GB CF card
Video Output: S-Video and USB 1.1 streaming digital video

XL PRO Specifications

Memory: 16MB internal Flash memory
Disk Drive: 3.5 in. Floppy (accepts 32 MB FlashPath® media)
Still Image Storage: .BMP uncompressed – 900 KB typical file size
 .JPG Super High Quality – 200 KB typical file size
 .JPG High Quality – 90 KB typical file size
 .JPG Low – 30 KB typical file size

Operating Environment

Tip Operating Temp: -25° to 80°C (-13° to 176°F)
System Operating Temp: -20° to 46°C (-4° to 115°F)
Storage Temperature: -25° to 60°C (-13° to 140°F)
Relative Humidity: 95% max
Waterproof: Insertion tube and tip to
 1 bar (14.7 psig, 10.2 m of H₂O, 33.5 ft. H₂O)
Hazardous Environments: Not rated for use in hazardous environments

Standard System Includes

- 6.2 mm Ø VideoProbe with LCD hand-piece
- Processor Light Source/CCU
- Shipping Case with working tool storage compartment
- Neck Strap
- Sun Visor
- User's Manual

Hand-Piece

Dimensions: 30.5 x 14.7 x 12.7 cm (12.0 x 5.8 x 5.0 in.)
Weight: 2.3 kg (5.1 lbs.) typical; includes insertion tube, power plug, power tube and hand-piece
 1.52 m (5.0 ft.)
Power Tube: ABS housing with integrated Santoprene® bumpers
Construction: 12.7 cm (5.0 in.) diagonal integrated TFT color LCD
LCD Monitor: 360° All-Way® servo-motor tip articulation
Articulation: Joystick and complete button function set
User Controls: Integrated high-sensitivity microphone

Tip Articulation

Up/Down-140° min, Left/Right-140° min
Note: Typical articulation exceeds minimum specifications

Measurement

Supported Measurement Features:

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

CAMERA DIAMETER	INSERTION TUBE WORKING LENGTH	
6.2 mm (0.24 in.)	2.6 m (8.5 ft.)	3.2 m (10.5 ft.)



XL PRO PLUS with CompactFlash drive



XL PRO with floppy drive

Technical Specifications

Software

Operating System:	Real-time multitasking
User Interface:	Simple drop-down menu-driven operation
File Manager:	File and folder creation, naming, copying, deletion
Audio Data:	PC compatible, 15 second files (.WAV format)
Image Controls:	Handset brightness control – gain and exposure
Image Management:	Single button freeze frame, Full or Split screen
Exposure Control:	Automatic or Manual (34 msec to 8 seconds)
Digital Zoom:	1X to 3X – Continuous and 5-Level Stepped
Still Image Formats:	BITMAP or JPEG (Super High, High or Low .JPG)
Video Record Formats:	MPEG2 (High or Low), MPEG1 (High, Med or Low)
Annotation:	Text and Graphic screen overlays and custom logos
Articulation Controls:	All-Way® steering, Steer-and-Stay™, Home, Fine or Coarse
Lamp Control:	Manual brightness and software On/Off
Software Updates:	Field upgradeable via removable media
Remote Control:	PC control via iVIEW™ Remote XL PRO™ application

Languages

User selectable: English, French, German, Italian, Japanese, Portuguese, Russian, Spanish, Swedish, Chinese and Czech



Tip/Lens Options

*FOV is specified diagonally. **Magnification specifications at near-side of tip Depth of Field.

TIP VIEW	TIP COLOR	FIELD OF VIEW (FOV)*	DEPTH OF FIELD (DOF)	MAGNIFICATION** 13" MONITOR / 5" LCD	6.2 mm Ø PROBE TIP PART #
Standard Tip Optics					
FORWARD	NONE <input checked="" type="checkbox"/>	40°	100 mm (3.94 in.) – infinity	5X / 2X	PXT6240FF
FORWARD	YELLOW <input type="checkbox"/>	120°	25 mm (0.98 in.) – infinity	7X / 3X	PXT62120FF
FORWARD	BLACK <input type="checkbox"/>	120°	4 – 190 mm (0.16 – 7.48 in.)	33X / 13X	PXT62120FN
SIDE	GREEN <input type="checkbox"/>	80°	18 mm (0.71 in.) – infinity	12X / 5X	PXT6280SF
SIDE	BLUE <input type="checkbox"/>	120°	5 mm (0.20 in.) – infinity	24X / 9X	PXT62120SN
StereoProbe® Measurement Tip Optics					
FORWARD	BLACK <input type="checkbox"/>	60°/60°	4 mm (0.16 in.) – 80 mm (3.15 in.)	30X / 12X	PXTM626060FG
SIDE	BLUE <input type="checkbox"/>	60°/60°	4 mm (0.16 in.) – 80 mm (3.15 in.)	30X / 12X	PXTM626060SG



Bolt retrieval using 3 mm Alligator working tool



Shim tool



Hook tool attachment

NSN listed and approved for use on the F100, F101, F108, F110, F118 and F119 engines, our 6.2 mm Ø VideoProbe® system is the universal tool for military aircraft engine inspection.



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