Everest Mentor Flex VideoProbe™

Faster. More Accurate. Better.

Streamlined to simplify the complex.

It's that simple.

As the worldwide leader in remote visual inspection (RVI) and video borescope technology, our intention has always been to empower inspectors to solve the complex with effortless simplicity.

With mounting demand to get inspections done quicker and cheaper, without compromising the accuracy of the results, most equipment can't withstand the pressure. Combining portability with military-grade durability, the Everest Mentor Flex answers the call with the features you've always wished you'd had, for the tasks that demand it — all to help you make smart decisions, fast.

Raise the bar with an unrivaled digital inspection.

More precise and efficient everyday inspections are now possible with Waygate Technologies' Everest Mentor Flex VideoProbe™. And when you've got great image quality to easily identify defects and tools that eliminate the hassle, inspections become faster than ever before.

Intuitive innovation

Save time, improve quality, and streamline the decision-making process at every level.

- **Virtual keyboard** for faster annotation.
- **Multi-point touchscreen** allows pinch-to-zoom and swipe-and-pan gesture functionality.
- **Menu Directed Inspection** (MDI) improves efficiency with **auto-tagging** and **automatic report generation.**
- **Smart Naming** automatically annotates images and provides smart file names.

Maximized measurement

Meet measurement requirements with quality and evaluate defects in depth.

- **Real3D Stereo measurement** provides a fully surfaced point cloud to analyze cursor placement for accurate measurement.
- **New MTD feature** calculates optical tip-to-target distance and Dynamic Advisory System provides real-time guidance to increase measurement accuracy.
- **Comparison measurement** checks the approximate size of defects quickly.

Precise articulation

Navigate inspections thoroughly, and accurately, at a fraction of the time and cost.

- **Responsive and powerful articulation.**
- **Upgraded articulation design** founded on high-power steering motors.

Rugged mobility

Expect top performance in even the harshest environmental conditions.

- Light, **portable,** and ergonomic design.
- Constructed with **ultra-durable, military-grade magnesium housings.**
- **Third-party tested.**

This is what visible confidence looks like.

The Everest Mentor Flex delivers cutting-edge TrueSight™ image clarity for more accurate assessments and increased probability of detection (POD). Expect high-quality, detailed images showcasing indications that were previously undetectable. See for yourself.

Subscribe to peace of mind.

Downtime is costly, but with flexible service offerings like our Flex subscription and Visual Care Plan, you'll have the coverage to keep the Everest Mentor Flex where you need it: in your hands. Because less downtime means more uptime.

HIGH DYNAMIC RANGE
Optimize image quality in scenes with shiny surfaces

NOISE REDUCTION
Intelligently analyzes live video to reduce visible noise

DARK BOOST
Assesses the content of scenes and intelligently adjusts levels to digitally brighten darker areas

COLOR SATURATION
Provides high-quality images with vivid hues

DISTORTION CORRECTION
Enables wide field-of-view optics without the distortions

Everest Mentor FLEX

TIP OPTICS
Variety of optical tip adapters to optimize based on depth of field and direction of view

LIGHT OUTPUT
Best-in-class white light LED

CAMERA RESOLUTION
440k-pixel image resolution

Prepare for a more predictable future.

Powered by InspectionWorks and dual-band Wi-Fi to make inspections consistent and efficient, the Everest Mentor Flex VideoProbe™ provides a built in hotspot to support wireless file transfers, video streaming, and remote control to iOS and Android devices, resulting in improved efficiency and flexibility on the job. And no matter what the future holds, easy wireless upgrades and planned software releases guarantee you'll be equipped for what's in store.

Get the most out of your inspection.

With these add-ons, you can maximize versatility and productivity while minimizing total cost of ownership for your Everest Mentor Flex device.

No matter the application, the Everest Mentor Flex can accommodate a wide variety of cases, including hands-free use, improving ergonomics and making everything that much simpler.

BACKPACK

TELESCOPING POLE

HOOK

MAGIC ARM

STRAP

KICKSTAND

USB PROBES

For small-diameter video borescopy applications, 2.2 and 3.0 mm probes provide easy USB connectivity for a cost effective solution providing all the high-end features you expect from your Mentor Flex system.

The NDT software platform of the future.

InspectionWorks is a software platform which provides a suite of digital tools used to make inspections consistent and more efficient, while turning inspection data into a tool for faster and better decisions..

InspectionWorks Connect provides real-time video streaming, remote control, and wireless file transfer to an iOS or Android device.

InspectionWorks Insight is a comprehensive data management and inspection database enabling global access to data and analytics. With Push2IW, data is automatically pushed to the cloud during the inspection to streamline data management and ensure against lost data.

InspectionWorks Store, Public and Private provides access to workflows and reference libraries. The Public stores contains manuals, analytic data sheets, MDI templates, and other reference materials. The Private store is available to share with members of your InspectionWorks account and distribute custom MDI workflows, reference documents, or any other resources your team may need.

Operating Temperature	
Tip	-25°C to 100°C (-13°F to 212°F). Reduced articulation below 0°C (32°F)
System	-25° to 46°C (-13°F to 115°F). LCD may require warm-up period below 0°C (32°F).
Storage Temperature	-25° 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 H2O, 33.5 ft of H2O)

Camera	
Diameter Probe	3.9 mm (0.15"), 4.0 mm (0.16"), 6.1 mm (0.24"), 8.4 mm (0.33")
Image Sensor	1/6" Color SUPER HAD™ CCD camera (6.1 mm, 8.4 mm) 1/10" (3.9mm, 4.0 mm)
Pixel Count	440,000 pixels
Housing	Titanium

System	
System Dimensions	13.7 cm x 19.7 cm x 38.1 cm (5.4" x 7.2" x 15")
Case Dimensions	Small case 35.0 x 54.5 x 23.0 cm (13.78" × 21.46" × 9.05") Backpack case 54.2 x 40.2 x 22.0 cm (21.3 x 15.8 x 8.6")
System Weight	In small case with contents: 10.2 kg (22.4 lbs) Out of Case: system - 2.50 kg (5.5 lbs) In backpack case with contents: 7.28 kg (16.05 lbs)
Construction	Magnesium and polycarbonate housing with integrated elastomeric bumpers
LCD Monitor	Integrated (5.8") transmissive color TFT WXGA Advanced Wide View (AWV) LCD, daylight readable display with optically bonded, multipoint capacitive Gorilla® Glass touchscreen
Joystick Control	360° All-Way® tip articulation, menu access, and navigation
Button Set	Access user functions, measurement, and digital functions
Internal Memory	32 GB
Data I/O Ports	Two USB 2.0 host "A" ports

Video Out	HDMI
Brightness Control	Auto and Variable
Illumination Type	White LED
Long Exposure	Auto – up to 16 seconds
White Balance	Factory default or user defined
Wi-Fi Adapter	802.11a/b/g/n, 2x2 A WLAN
Modulations	DSSS, OFDM

Power Supply

Lithium Ion Battery	3-hour runtime, 10.8 V (nominal), 73Wh, 6.8Ah

Current

AC	100-240 VAC, 50-60 Hz, <1.5 A RMS
DC	18 V, 3.34 A

Standards Compliance and Classifications

MIL-STD-810H	United States Department of Defense Environment Tests Sections 501.7, 502.7, 506.6, 507.6, 509.7, 510.7, 511.7, 514.8, 516.8, 521.4
MIL-STD-461G	U.S. Department of Defense — Electromagnetic Interference RS103, RE102 - ABOVE DECK
Standards Compliance	Group 1, Class A: EN61326-1, UL, IEC, EN CSA-C22.2:61010-1, UN/DOT T1-T8
IP Rating	IP65

Software

Operating System	Embedded, multi-tasking operating system
User Interface	Menu-driven and soft button operation; menu navigation using either touch screen or joystick
File Manager	Embedded file manager supports the following operation on files and folders: copy, paste, create, and delete. USB and internal flash storage
Image Control	Brightness, invert, inverse+, distortion correction, noise reduction, HDR, dark boost, color saturation, illumination, long exposure, exposure lock, single view, zoom (5x digital), image capture and recall
Digital Zoom	Continuous (5x)
Image Formats	JPEG (.JPG)
Video Format	MPEG4 AVC /H.264 (.MP4)
Video Recording	Frame rate: 60 fps
Text Annotation	Built-in full-screen text overlay generator
Graphic Annotation	User placement of arrows
Articulation Control	User-selectable steer vs. Steer-and-stay articulation; tip "Home" return to neutral forward-tip orientation
Software Updates	Wireless over the air or field upgradeable via USB thumb drive
InspectionWorks Connect Local	Wired or wireless file transfer and video streaming to iPad or iPhone
Languages	English, Arabic, Chinese, Czech, Dutch, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Polish, Portuguese (Brazil), Russian, Spanish, Swedish, Turkish, Taiwanese
Application Software	Menu Directed Inspection (MDI) software digitally guides inspectors through the inspection process, intelligently names files and creates MS Word® and PDF compatible inspection reports. Inspection Manager software enables viewing, annotation, and re-measurement of images on a PC.

Technical specifications: Probes and tips

Probe Measurements	
Diameter	**Length**
3.9 mm (0.15") or 4.0 mm (0.16")	2.0, 3.0 m (6.6, 9.8 ft.)
6.1 mm (0.24")	2.0, 3.0, 3.5, 4.5, 6.0, 8.0 m (6.6, 9.8, 11.5, 14.8, 19.7, 26.2 ft.)
8.4 mm (0.33")	2.0, 3.0, 4.5, 6.0, 8.0, 10.0 m (6.6, 9.8, 14.8, 19.7, 26.2, 32.8 ft.)
Longer lengths up to 30m are available. Contact your sales representative for details.	

Tip Articulation	
Insertion Tube Length	**Articulation**
2 m – 4.5 m	Up/Down 160° min, Left/Right 160° min
6 m – 10 m	Up/Down 140° min, Left/Right 140° min
Note: Typical articulation exceeds minimum specifications.	

Tips specifications

3.9 mm Tips				
Part No.	**Color**	**FOV (deg)**	**DOF (mm)**	**DOF (in)**
Forward View				
PXT480FG*	None	80	6-80	.24-3.15
PXT490FN	Orange	90	3-40	.12-1.57
Side View				
PXT480SG*	Brown	80	4-80	.16-3.15
PXT490SN	Red	90	2-16	.08-.63
Stereo Measurement				
PXTM45050FG*	Black	50/50-FWD	5-45	.20-1.77
PXTM45050SG*	Blue	50/50-SIDE	4-45	.16-1.77

4.0 mm Tips				
Part No.	**Color**	**FOV (deg)**	**DOF (mm)**	**DOF (in)**
Forward View				
T4080FF*	None	80	35-inf	1.38-inf
T40115FN	Black	115	4-inf	.16-inf
Side View				
T40115SN	Red	115	1-30	.04-1.18
T40120SF	Blue	120	6-inf	.24 - inf
Stereo Measurement				
TM405555FG	Black	55/55-FWD	5-inf	.20-inf
TM405555SG	Blue	55/55-SIDE	4-inf	.16-inf

6.1 mm Tips				
Part No.	**Color**	**FOV (deg)**	**DOF (mm)**	**DOF (in)**

Forward View				
T6150FF	None	50	50-inf	2.36-inf
XLG3T6150FG	White	50	12-200	.47-7.87
XLG3T61120FG	Black	120	5-120	.20-4.72
T61120FF	Gray	120	20-inf	.79-inf
XLG3T6180FN	Orange	80	3-20	.12-.79
XLG3T6190FF	Yellow	90	20-inf	.79-inf
XLG3T6150FB	Purple	50 (45 DOV)	12-80	.47-3.15
T6165FF*	Orange/Blue	65	65-inf	2.56-inf
Side View				
XLG3T6150SF	Brown	50	45-inf	1.77-inf
XLG3T6150SG	Green	50	6-160	.35-6.30
XLG3T61120SG	Blue	120	4-100	.16-3.94
XLG3T6180SN	Red	80	1-20	.04-.79
Stereo Measurement				
XLG3TM616060FG	Black	60/60-FWD	4-80	.16-3.15
XLG3TM615050SG	Blue	50/50-SIDE	2-50	.08-1.97

8.4 mm Tips

Part No.	Color	FOV (deg)	DOF (mm)	DOF (in)
Forward View				
XLG3T8440FF*	None	40	250-inf	9.84-inf
XLG3T8480FG	Yellow	80	25-500	.98-19.70
XLG3T84120FN	Black	120	5-200	.20-7.87
T84120FF	Orange/Blue	120	20-inf	.79-inf
XLG3T8440FG	White	40	80-500	3.15-19.70
Side View				
XLG3T8440SF*	Brown	40	240-inf	9.84-inf
XLG3T8480SG	Green	80	25-500	.98-19.70
XLG3T84120SN	Blue	120	4-200	.16-7.87
Stereo Measurement				
XLG3TM846060FG	Black	60/60-FWD	4-50	.16-1.97
XLG3TM846060SG	Blue	60/60-SIDE	4-50	.16-1.97

Indicates tip with maximum brightness

The answer is simple.

When time is critical and inspections need to be precise, your choice in borescope matters. But when the price-competitive Everest Mentor Flex delivers the same level of confidence you've come to expect from Waygate Technologies — all while future-proofing your inspections — the answer is simple.

See how Waygate Technologies is revolutionizing the digital inspection landscape. Contact your sales representative for a demonstration.

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Baker Hughes >>

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