



# FLIR VS70 The Next Generation Video Borescope



Industrial Maintenance | Power Plants | Petrochemical | Aviation & Marine MRO  
HVAC | Vehicle Fleet Service | Building Inspections | Site Investigations

# FLIR VS70

Patent# US D6971215



- Record thousands of images and hours of video on a standard SD card
- Grab still images from captured video directly on the base unit
- Add voice annotations to clarify findings and reduce note-taking

## High Tech, Waterproof and Versatile



Let the VS70 take you where few have gone before.

Bring hidden problems into clear view by accessing extremely confined areas. The new FLIR VS70 is a rugged, waterproof videoscope featuring user-friendly, ambidextrous handset controls that help you easily maneuver the narrow camera probe into extremely tight spaces to uncover hidden problems.

View clear video and images on the durable 5.7" (145mm) color LCD display that is easy to see, even in bright outdoor areas. All cameras are equipped with adjustable LED lights to illuminate dark inspection targets. On-screen menus include support for 26 languages.



Inputs include USB port, SD card slot, video out, earphone and AC power jacks



Includes a car charger to keep your VS70 working all day long





- *Waterproof base unit*
- *Drop-proof to 2 meters (6.5')*
- *Oil and chemical resistant*
- *Tungsten reinforced cameras*

# VS70 Heavy Duty

## Rugged and Reliable

World-class features that meet your real-world needs

The FLIR VS70's rubber-reinforced case is waterproof and dust-proof (IP67-rated) – as well as oil and chemical resistant. Drop-tested from a height of 2 meters (6.5 feet), the VS70 is built for rough use in harsh environments.

Designed for on-the-job endurance, the VS70 has a rechargeable lithium battery that lasts 6 to 8 hours. Flexible USB recharging options and the included vehicle charger means your VS70 will work all day long.



# FLIR Flexibility

- **Industrial Maintenance**
- **Power Generation Plants**
- **Petrochemical & Refineries**
- **Government & Security**
- **Aircraft & Marine Inspections**
- **Vehicle Diagnostics**
- **HVAC Troubleshooting**
- **Building Inspections**

## Flexible For Various Industries & Applications

Industrial Maintenance – Check weld integrity, process equipment, machinery and storage tanks.

Aircraft Inspections – Inspect airframes/systems for cracks, wear, debris, and contamination.

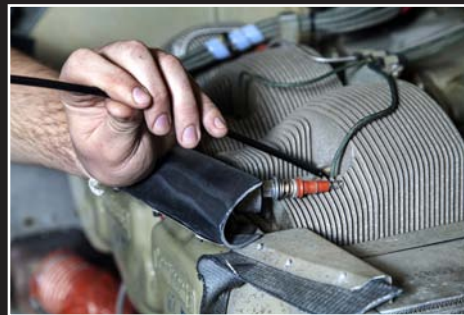
Building Inspections – Access wall cavities to find wiring, pipes, leaks, mold growth, insect infestations.

Vehicle Service – See inside and around engines, transmissions, and other hard-to-reach vehicle areas.

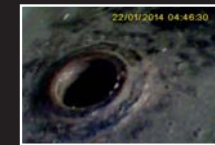
HVAC Repairs – Look inside duct work, behind motors and compressors, and within piping and walls.



Generator inspection



Inspecting cylinder in aircraft motor with VSA2-1M



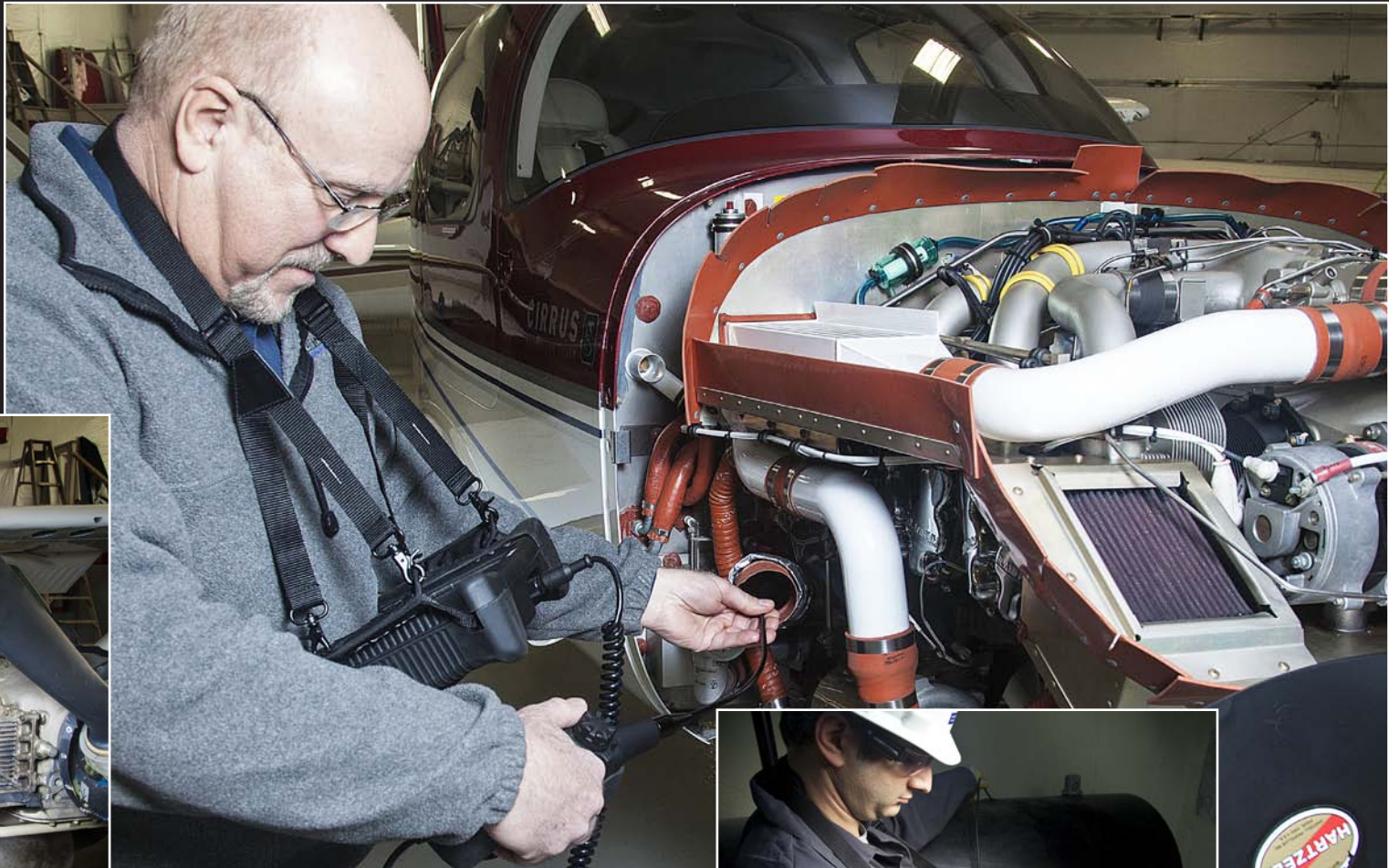
Inspection bore of tank using 6mm Long Focus camera (VSA2-1)



Internal duct work using 28mm detachable camera head (VSC28)



Exhaust fan blades using 6mm Long Focus camera (VSA2-1)



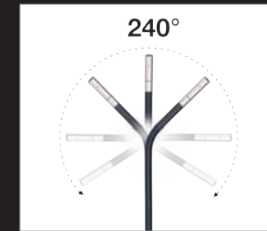
*Checking aircraft engines and airframes for cracks, wear, defects and debris; Inspecting oil tank for corrosion*



*Thermostat valve using 6mm Short Focus camera (VSA2-1M-W)*

# VS70 Cameras

- **Cameras from 3.9 to 28mm**
- **Short & long focal lengths**
- **Integrated LED lights**
- **Tungsten-reinforced tips**



3.9mm (0.15 in)  
VSC39-1FM

4.1mm (0.16 in)  
VSC41-2RM

5.8mm (0.23 in)  
VSC58-20M\*

5.8mm (0.23 in)  
Dual Camera  
VSC2-58-1FM

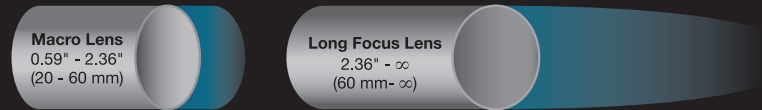
6.5mm (0.26 in)  
90° Mirror Tube  
VSC65-12S\*\*

8mm (0.32 in)  
VSC80-1R\*\*\*

25mm (1 in),  
72° Field of View  
VSC25

28mm (1.1 in),  
110° Field of View  
VSC28

## Customizable Camera Options



### Camera Probes and Camera Lenses

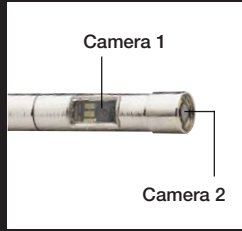
A wide variety of camera probe diameters (from 3.9mm to 28mm) enable users to gain access into otherwise inaccessible areas. Probe sizes are selected based on the width of access points.

Long Focus (65mm/2.36" to ∞) Lenses enable you to see further within confined areas. They are ideal for accessing larger areas where the inspection targets are viewed at longer distances from the camera tip.

Short Focus (20 to 65mm / 0.59" to 2.36") Lenses let you perform inspections in areas where close-up viewing of detailed features is essential, such as when inspecting turbine blades or boiler tubes.



VSC65-17S



VSC2-58-1FM

Dual Camera lets you switch between a wide-angle 180-degree or standard 90-degree angle lens by simply pressing a button on either side of the base unit.

# VS70 Accessories

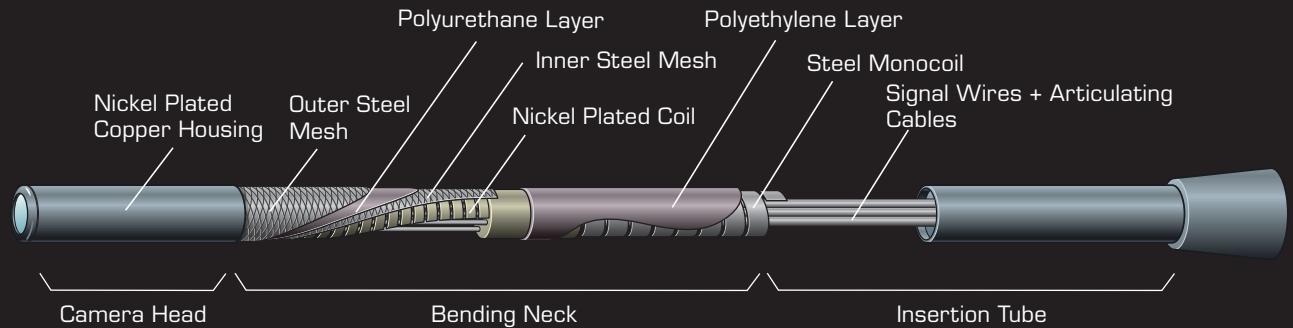
## Specialty Tools

The wireless handset transmits more than 30 meters to the base unit, making inspections easier in tight spots or when you want to mount the VS70 on a tripod. Wired and wireless handsets make it easier to manipulate the camera probe and keep the display in a stable position.

For even more camera control, two-way, 240-degree articulation enables you to look around within confined areas. Articulating 6mm cameras are available on dedicated wired or wireless handsets, with short and long focus lenses, and semi-rigid cables in one- and two-meter lengths.



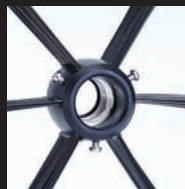
VSA2-1-W



VSS-20



VSC25 & VSC28



VS-BR25

Detachable 25 and 28mm "plumbing" camera heads are designed for use with 20- and 30-meter fiberglass cables on wearable spools to make plumbing inspections a snap. Available brush kits enable users to center their plumbing cameras inside larger pipes and ducts.

# FLIR Pre-Packaged Kits

The FLIR VS70 is available in seven pre-bundled kits to simplify the selection process. The seven kits we offer address the most common videoscope applications.



Wired articulated camera probe VSA2-1



Videoscope Transmitter (VST)

KIT	COMPONENTS	DESCRIPTION
<b>VS70-1</b>	VS70 + VSC80-1R + accessories + case	<b>General Purpose (Wired) Long Focus Combo Kit</b> includes the VS70, base kit and 8mm long focus camera on a 1-meter semi-rigid cable. This kit enables users to perform basic inspections and add options as needs grow.
<b>VS70-1W</b>	VS70 + VST + VSC80-1R + accessories + case	<b>Wireless General Purpose Combo Kit</b> includes the VS70, wireless handset (VST), and a non-dedicated 8mm long focus camera on a 1-meter semi-rigid cable. The wireless handset makes it easy to manipulate the camera probe while keeping the display in clear view.
<b>VS70-2</b>	VS70 + VSC58-1RM + accessories + case	<b>Small Opening Short Focus Combo Kit</b> includes the VS70, base kit, and a 5.8mm short focus camera on a 1-meter semi-rigid cable. Allows close-up inspections.
<b>VS70-3</b>	VS70 + VSA2-1 + accessories + case	<b>Wired Articulation Combo Kit</b> includes VS70 and wired handset with dedicated 6mm long focus camera with 2-way articulation on a 1-meter semi-rigid cable. Long focus offers farther viewing distances and articulation provides greater internal camera control.
<b>VS70-3W</b>	VS70 + VSA2-1-w + accessories + case	<b>Wireless Articulation Combo Kit</b> includes VS70 and wireless handset with a dedicated 6mm long focus camera and 2-way articulation on a 1-meter semi-rigid cable. Offers farther viewing and greater internal camera control.
<b>VS70-Kit</b>	VS70 + VSA2-1 + VSC80-1R + accessories + case	<b>Starter Bundle</b> includes the VS70 and a wired handset with a dedicated 6mm long focus camera with 2-way articulation on a 1-meter semi-rigid cable, and an 8mm long focus camera on a 1 meter semi-rigid cable.
<b>VS70-Kit-W</b>	VS70 + VSA2-1-W + VSC80-1R + accessories + case	<b>Wireless Bundle</b> includes the VS70 and a wireless handset with a dedicated 6mm long focus, 2-way articulation camera on a 1-meter semi-rigid cable, and an 8mm long focus camera on a 1-meter cable.

All cameras are available in your own custom configurations – please refer to page 10 under "Mix-and-Match Options"



*All cameras come with 3 screw-on Accessory Tips*

- *Anti-Snag Ball helps prevent cameras from hanging up on rough surfaces*
- *Magnet Tip retrieves small steel objects*
- *Mirror Tip creates 90° side views*

## VS70Kit Components

# What's in the Box

The VS70 base kit comes with:

- VS70 Videoscope
- 4GB SD card
- USB/video out cables
- Power adapters
- Vehicle charger
- Audio headset
- Shoulder strap
- Cleaning kit
- Hard case
- User manual (printed and on CD).



Items included with the purchase of the VS70 main unit

# Mix-and-Match Options

## Customized Solutions

The FLIR VS70 is available with a wide range of probes and other accessories that enable users to create custom-configured solutions that meet their specific needs. One such accessory is the Videoscope Transmitter (VST), a general purpose wireless transmitter designed to work with all cameras.

Choose the right optical camera tip available with the VS70—long focus or macro focus—that’s right for your job requirements.

ACCESSORIES		
Wireless	VST	Wireless 2.4Ghz VS70 transmitter
General Meter Accessories	VSA-AP	Accessory Pouch for VS70 including universal battery charger and cleaning kit
	VS-2PC	2 Meter Patch Cable
	VS-NS	Hands Free Neck Strap Harness for VS70
Detachable Camera Accessories	VS-BR25	Centering Brush for VSC25
	VS-BR28	Centering Brush for VSC28
	VS-RB	Replacement Centering Brush

## SELECTION GUIDE

**Answer the below questions to begin the selection process. Match up the colored circles in the Selection Guide to the VS70 options that best meet your needs.**

### Smallest opening sizes?

- Smallest diameter cameras for openings less than 5mm
- Smaller diameter cameras for openings less than 10mm (3/8”) in size
- Larger diameter cameras for openings more than 10mm (3/8”) in size

### Distance to inspection targets?

- Short Focus Cameras to check for fine details from 20 to 60mm away
- Long Focus Cameras to see distances from 65mm to ∞

### Typical target distances?

- 1-Meter Cables for shorter distances
- 2-Meter Cables for distances greater than 1 meter
- 20- or 30-Meter Cables for longer distances

### Need More Viewing Options?

- 2-Way Articulation Camera
- Dual Camera (180/90°) Camera
- Rigid Probe with Rotating Mirror

TYPE	PART NUMBER	SOLUTION	DIAMETER (MM)	LENGTH (M)	RESOLUTION (PX)	FIELD OF VIEW (°)	FOCAL LENGTH (MM)	WIRELESS
<b>ARTICULATING CAMERAS</b>								
2-Way Articulation Wireless Handset with integrated cable and camera	VSA2-2M-W		6	2	307,200	56	20 to 60	Yes
	VSA2-2-W		6	2	307,200	56	65 to ∞	Yes
	VSA2-1M-W		6	1	307,200	56	20 to 60	Yes
	VSA2-1-W		6	1	307,200	56	65 to ∞	Yes
2-Way Articulation Wired Handset with integrated cable and camera	VSA2-2		6	2	307,200	56	65 to ∞	With VST
	VSA2-2M		6	2	307,200	56	20 to 60	With VST
	VSA2-1		6	1	307,200	56	65 to ∞	With VST
	VSA2-1M		6	1	307,200	56	20 to 60	With VST
<b>GENERAL INSPECTIONS</b>								
Small Diameter Cameras with cables	VSC41-2RM		4.1	2	76,800	53	20 to 60	With VST
	VSC39-1FM		3.9	1	76,800	53	20 to 60	With VST
General Purpose Cameras with cables	VSC58-2R		5.8	2	307,200	56	65 to ∞	With VST
	VSC58-2RM		5.8	2	307,200	56	20 to 60	With VST
	VSC58-1R		5.8	1	307,200	56	65 to ∞	With VST
	VSC58-1RM		5.8	1	307,200	56	20 to 60	With VST
	VSC80-2R		8	2	307,200	56	65 to ∞	With VST
	VSC80-1R		8	1	307,200	56	65 to ∞	With VST
<b>SPECIALTY INSPECTIONS</b>								
Dual Camera with cable	VSC2-58-1FM		5.8	1	307,200	56	20 to 60	With VST
Rigid Probe Cameras with handle	VSC65-17S		6.5	.43	307,200	56	20 to 60	With VST
	VSC65-12S		6.5	.30	307,200	56	20 to 60	With VST
<b>PLUMBING INSPECTIONS</b>								
Small Opening Camera on Long-Reach Cable	VSC58-30M		5.8	30	76,800	56	20 to 60	With VST
	VSC58-20M		5.8	20	76,800	56	20 to 60	With VST
Detachable Cameras for use with Plumbing Spool Cables	VSC25		25	—	307,200	72	60 to 600	—
	VSC28		28	—	307,200	110	60 to 600	—
Plumbing Spool Cables for use with Detachable Cameras	VSS-30		—	30	—	—	—	With VST
	VSS-20		—	20	—	—	—	With VST



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