

### TECHNICAL DATA

# ThermoView® TV30

## Highlights

### Stand-alone camera

Unrestrained, resilient, and completely customizable.

Monitor temperatures in severe environments without the need for vulnerable computer equipment. With multiple areas of interest (AOIs) and a rich feature set of on board field bus protocol options, the ThermoView TV30 thermal imager detects abnormalities with flexible precision.

### Directly integrate without a PC

Set up multiple areas of interest, monitor your process, and access on-board analytics of the fixed thermal imager through a web browser. Interface directly to PLC's or other devices using multiple fieldbus protocols or discreet I/O.

### Reduced installation cost and space savings

The fixed thermal imager's small footprint allows for easier installation, while multiple fieldbus options simplify integration with your existing process controllers and external devices.

### Avoid downtime or costly repairs

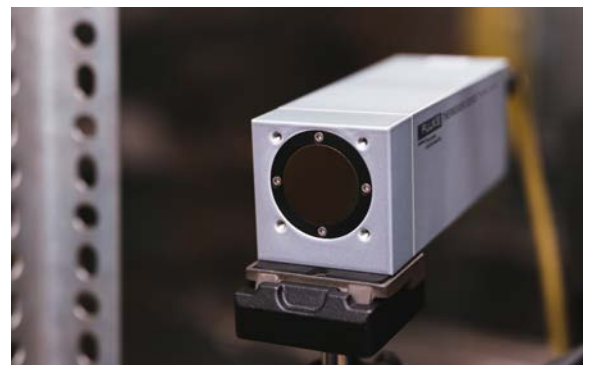
Continuously monitor assets, identify defects, and set up alarms when any anomalies are detected.

### Built to work in the harshest environments

IP67 housing that guarantees long-term use in the most rugged conditions, with air purge, water cooling jacket, and other accessories available.

### A New Angle

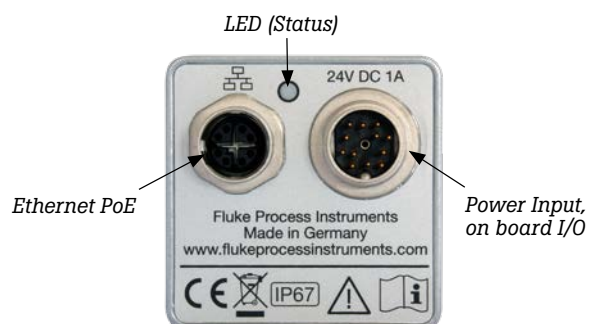
High Performance thermal imaging camera provides a rich feature set of automation and control capabilities along with the durability to meet the demanding industrial applications Fluke Process Instruments products are known for.



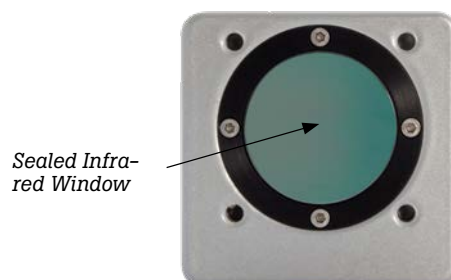
## Specifications

Models	TV33SA/TV36SA
Measuring Range	-10 to 1300 °C (14 to 2372 °F)
Measurement Accuracy	Down to ±2 °C or ±2 % (reading)
Infrared Resolution	TV33: 320 x 240 TV36: 640 x 480
Spectral Range	8 - 14 μm
Detector	Uncooled focal plane array
Lens Options	30° x 22° Standard 22° x 16° Telephoto 48° x 36° Wide Angle
Focus Range	Standard: 220 mm (8.7") to ∞ Wide Angle: 100 mm (3.9") to ∞ Telephoto: 190 mm (7.5") to ∞ Motorized lens focus
Frame Rate	9 or 60 Hz
Emissivity Correction	0.10 to 1.00
Supported Protocols	MQTT, OPC UA, TCP, DHCP, UDP, mDNS (Bonjour)
LED Display	Power supply indication, system error codes
Operating Temperature	-10 to 50 °C (14 to 122 °F)
Storage Temperature	-20 to 70 °C (-4 to 158 °F)
Humidity	Operating and storage 10 % to 95 %, non-condensing
Power Supply	24 VDC ± 20 % or Power over Ethernet (IEEE 802.3at)
Shock Resistance	IEC 60068-2-27 (mechanical shock): 50 g, 6 ms, 3 axes
Vibration Resistance	IEC 60068-2-26 (sinusoidal vibration): 3 g, 11 - 200 Hz, 3 axes
Environmental Protection	IP67
Dimensions (W x H x L)	Approximately 50 x 50 x 142 mm (1.96 x 1.96 x 5.58")

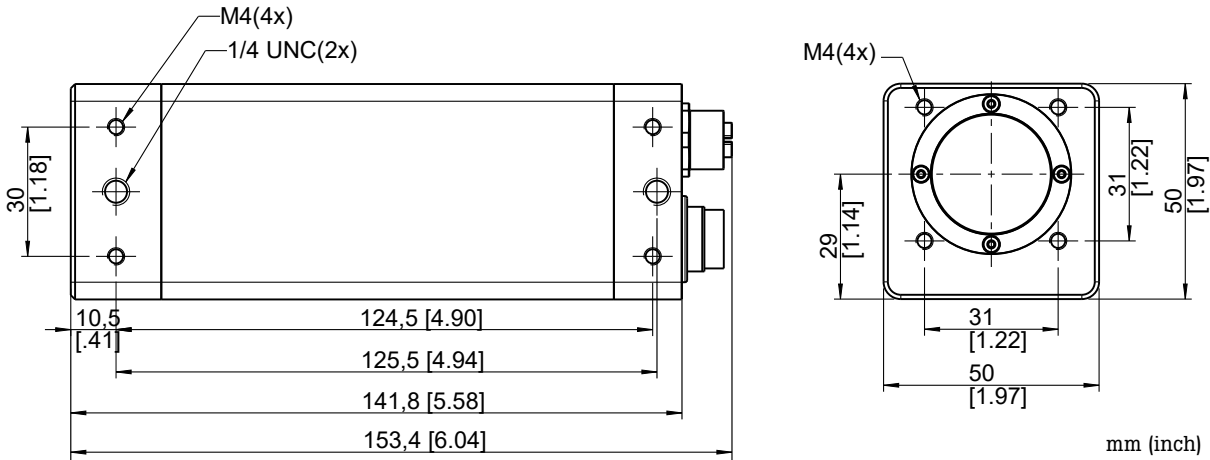
### Thermal Imager Rear View



### Thermal Imager Front View



**Thermal Imager Dimensions**



**Accessories**



**A-TV30-AP**

Air purge collar  
(For use with all TV30 camera models to keep the camera window clean)



**A-TV30-AP-WC**

Cooling jacket with air purge collar  
(For use in ambients up to 200 °C (392 °F))



**A-TV-ENCVW**

Outdoor enclosure

Additional accessories include but are not limited to:

- Mounting base (A-TV30-MB)
- Swivel bracket (A-BR-S)
- Various length Ethernet and fiber optic cables
- I/O accessories

**Scope of Delivery**

TV30 thermal imagers are shipped with:

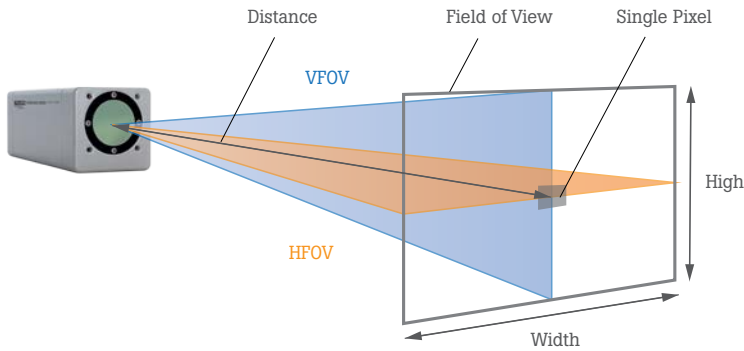
- Calibration certification
- Quick reference guide
- Safety sheet

## Distance to Object

### Lens Field of View examples (TV33)

Lens Type	Distance		HFOV		VFOV		Pixel Size	
	m	ft	m	ft	m	ft	mm	in
Standard Lens	0.5	1.6	0.3	0.9	0.2	0.6	0.82	0.032
	1.0	3.3	0.5	1.8	0.4	1.3	1.64	0.065
	3.0	9.8	1.6	5.3	1.2	3.8	4.90	0.193
	10.0	32.8	5.4	17.6	3.9	12.8	16.35	0.648
Wide Angle	0.5	1.6	0.4	1.4	0.3	1.0	1.31	0.516
	1.0	3.3	0.9	2.9	0.7	2.1	2.62	0.103
	3.0	9.8	2.7	8.7	2.0	6.4	7.85	0.309
	10.0	32.8	8.9	29.2	6.5	21.3	26.16	1.030

### Field of View



HFOV - Horizontal Field of View (horizontal aperture angle)  
VFOV - Vertical Field of View (vertical aperture angle)

Measuring field sizes can be calculated online at:  
[www.flukeprocessinstruments.com/TV30](http://www.flukeprocessinstruments.com/TV30)

*These products are controlled under ECCN 6A003 and an export license is needed for certain destinations. Please see RS1 controls for licensing requirements.*

## The Fluke Process Instruments Guarantee

The ThermoView TV30 thermal imager is supported by a two year warranty. With a network of trained representatives and agents in over one hundred countries and offices located in the U.S., Germany and China, we provide local service and support.

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### Worldwide Service

Fluke Process Instruments offers services, including repair and calibration. For more information, contact your local office.

[www.flukeprocessinstruments.com](http://www.flukeprocessinstruments.com)

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