

## **Vibration/Temperature Remote Sensor**

## **P/N: SV87**

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## **Document identity**

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#### Website

http://www.flir.com

### **Customer support**

http://support.flir.com

### Disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply. Products described herein may be subject to US Export Regulations. Please refer to exportquestions@flir.com with any questions.



## **General description**

Vibration / Temperature Remote Sensor

This is a battery powered remote Vibration/Temperature sensor for the Vibration Monitoring Solution. It collects vibration and temperature readings every 90 seconds. This data is automatically sent to the Remote Monitoring Gateway via Bluetooth®.

Measurement		
Sensitivity Range	±32 g	
Frequency Range	10 Hz to 1 kHz	
Velocity Data	mm/s or in/s derived from FFT	
Capture Rate	One data point/90 sec	
Contact Temperature Range	-30°C to 80°C (-22°F to 176°F)	
Environmental		
Operating Temperature Range	-30°C to 80°C (-22°F to 176°F)	
Storage Temperature Range	-30°C to 80°C (-22°F to 176°F)	
Relative Humidity	10 to 95% non-condensing	
Altitude	2000 m	
IP Rating	IP67 (IEC 60529)	
Drop Test	1 m	
Certification	ETL, IC, FCC, CE, RCM	
Power		
Battery type	3.6 V Lithium battery	
Battery life	4 years (varies by usage)	
Battery status	Low battery LED indicator	
Data communication interfaces		
Bluetooth® Range (during a session)	65 m, line-of-sight	
Bluetooth® Type	BLE 4.2	
Physical data		
Weight (including battery)	62 g (0.14 lbs.)	
Size (L × W × H)	6.5 x 2.5 x 2.7 cm (2.54 x 0.98 x 1.05 in)	
Warranty and service		
3-year warranty	www.flir.com/testwarranty	

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## **Vibration/Temperature Remote Sensor**

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Shipping information		
Packaging, type	Cardboard box	
Included	Vibration / Temperature Remote Sensor for Vibration Monitoring Solution including adhesive tape.	
Packaging, weight	64 g (0.14 lbs.)	
Packaging, size	7 x 2.95 x 2.95 cm (2.73 x 1.15 x 1.15 in)	
EAN-13	0793950438701	
UPC-12	793950438701	
Country of origin	Taiwan	

## Compatible with the following products:

• SV87-KIT; FLIR SV87-KIT: Vibration Monitoring Solution

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## FLIR COMMERCIAL SYSTEMS, INC.

9 Townsend West, Nashua NH 03063 / Phone: 603.324.7800 / Fax: 603.324.7864

## **Declaration of Conformity**

Extech Model: SV87

Description: Vibration and Temperature Remote Sensor

Date of Issue: 17-Nov-20

We, FLIR Commercial Systems, Inc., 9 Townsend West, Nashua, NH 03063 declare that a sample of the product listed above has been tested by a third party for CE marking according to:

EMC Directive: 2014/30/EU

**Report Number: 200600017TWN-001** 

Report Date of Issue: 6/29/2020

**Standards:** 

EN 55032: 2015/AC: 2016 EN IEC 61000-3-2: 2019 EN 55024: 2010+A1: 2015 EN 61000-3-3: 2013+A1: 2019

LVD Directive: 2014/35/EU

**Report Number: 200600020TWN-001** 

Report Date of Issue: 8/25/2020

**Standards:** 

EN 62368-1:2014+A11:2017 (IEC 62368-1:2014 (Second Edition))

RED Directive: 2014/53/EU

Report Number: 200600017TWN-001

Report Date of Issue: 6/29/2020

**Standards:** 

ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.1.1

RoHS Directive: EU Directive 2015/863/EU (RoHS 3)

The test reports show that the product fulfills the requirement in the EC Low Voltage Directive, EMC Directive, RED Directive, and RoHS Directive for CE Marking. On this basis, together with the manufacturer's own documented production control, the manufacturer (or his European authorized representative) can in his EC Declaration of Conformity verify compliance with the EC Low Voltage Directive, EMC Directive, RED Directive, and RoHS Directive.

Mark Sultzbach / QA Manager



Taipei, Taiwan Aug 3, 2021

## **UK Declaration of Conformity**

Product: FLIR SV87

Name and address of the manufacturer: Teledyne FLIR LLC,

9 Townsend West, Nashua, NH 03063

This declaration of conformity is issued under the sole responsibility of the manufacturer.

The object of the declaration: FLIR SV87.

The object of the declaration described above is in conformity with the relevant statutory requirements applicable to the specific product:

## Standards review between UK and EU

UK legislation refr.	UK designated standard*	EU regulation refr.	EU harmonised standard
EMC		EMC	
S.I. 2016 No. 1091	EN 55032: 2015/AC: 2016	2014/30/EU	EN 55032: 2015/AC: 2016
S.I. 2016 No. 1091	EN 55024: 2010	2014/53/EU	EN 55024: 2010+A1: 2015
S.I. 2016 No. 1091	EN 61000-3-2	2014/53/EU	EN 61000-3-2: 2019
S.I. 2016 No. 1091	EN 61000-3-3	2014/53/EU	EN 61000-3-3: 2013+A1: 2019
S.I. 2017 No.1206	ETSI EN 301 489	2014/53/EU	ETSI EN 301 489-1 V2.2.3
S.I. 2017 No.1206	E TSI EN 301 489	2014/53/EU	ETSI EN 301 489-17 V3.1.1
LVD Directive		LVD Directive	
S.I. 2016 No. 1101	EN 62368-1:2014	2014/35/EU	EN 62368-1: 2014+A11: 2017
S.I. 2016 No. 1101	EN 62368-1:2014	2014/35/EU	IEC 62368-1:2014 (2 <sup>nd</sup> Ed)
RoHS			
S.I. 2012 No. 3032	EN 50581:2012	2015/65/EU (RoHS)	EN 50581:2012

## \* https://www.gov.uk/guidance/designated-standards

Designated standards: EMC – consolidated list, version 1, 1 January 2021

Designated standards: Low voltage equipment - consolidated list, version 1, 1 January 2021

Designated standards: RoHS – consolidated list, version 1, 1 January 2021

## **FLIR Commercial Systems**

**Quality Assurance** 

Hank Tsai

**Quality Manager** 

# Wuhan Lixing (Torch) Power Sources Co., Ltd. Material Safety Data Sheet (MSDS)

LX-QR-824-40

## I. Description and Company data

Name: Lithium metal battery (ER14505 3.6V 2400mAh 8.64Wh)

Manufacturer Information:

Name: Wuhan Lixing (Torch) Power Sources Co., Ltd.

Chemical System: Lithium thionyl chloride battery

Product nominal voltage: 3.6V
Designated for recharge: No

## **II. Chemical Component/Hazardous Ingredients**

( )Simple ( Yes )Admixture

Chinese Name: 锂-亚硫酰氯电池

English Name : Lithium thionyl chloride cylindrical battery

CAS NO . : 1313-13-9

UN NO.: 3090

Material Component (%)::

Lithium: 3-4(wt%) (0.87fg for ER18505M, 0.48g for ER14335, 0.4g for ER14250, 0. 75g for ER14505, 1.56g for ER26500, 3g for ER34615)

Material	CAS No.	Approximate Percent ( wt % )
thionyl chloride	7719-09-7	25.5
Carbon black	1333-86-4	2.95
Teflon	9002-84-0	0.236
Lithium	7439-93-2	3.36
Lithium Aluminum Tetrachloride	14024-11-4	3.61
Sulfur Dioxide	7446-09-5	1.81
Copper Powder	7440-50-8	0.236
Stainless Steel	7439-89-6	56.2
Glass fiber membrane	65997-17-3	0.2
other		5.9

NOTE: The battery should not be opened or exposed to heat because exposure of the ingredients contained within could be harmful under some circumstances.

## **III. Possible Hazardous**





NO.1114090193

# 检验报告

# Test Report

样品名称:

锂-亚硫酰氯柱式电池 ER14505 3.6V 2400mAh

Name of Sample:

Li/SOCL2 Cylindrical Batteries ER14505 3.6V

2400mAh

委托单位:

武汉力兴 (火炬) 电源有限公司

Consignor:

WUHAN LIXING (TORCH) POWER SOUCES CO., LTD



Shanghai Research Institute of Chemical Industry Testing Centre