

## P/N: 89401-0202

### Copyright

© 2020, FLIR Systems, Inc.

All rights reserved worldwide. Names and marks appearing herein are either registered trademarks or trademarks of FLIR Systems and/or its subsidiaries. All other trademarks, trade names or company names referenced herein are used for identification only and are the property of their respective owners.

### Document identity

Publ. No.: 89401-0202

Commit: 66090

Language:

Modified: 2020-05-12

Formatted: 2020-05-12

### 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](mailto:exportquestions@flir.com) with any questions.



<b>Imaging and optical data</b>	
IR resolution	160 × 120 pixels
Thermal sensitivity/NETD	< 70 mK
Field of view (FOV)	54° × 42°
Minimum focus distance	<ul style="list-style-type: none"> <li>Thermal: 0.1 m (0.32 ft)</li> <li>MSX: 0.3 m (0.98 ft)</li> </ul>
Spatial resolution (IFOV)	6.3 mrad/pixel
F-number	1.1
Image frequency	8.7 Hz
Focus	Focus free
<b>Detector data</b>	
Detector type	Focal plane array, uncooled microbolometer
Spectral range	8–14 μm
Detector pitch	12 μm
<b>Image presentation</b>	
Display resolution	640 × 480 pixels
Screen size	3.5 in
Aspect ratio	4:3
Auto orientation	Yes
Touch screen	Yes, capacitive
Display technology	IPS
Image adjustment	<ul style="list-style-type: none"> <li>Automatic level and span</li> <li>Manual level and span</li> <li>1-Touch level and span</li> </ul>
Image modes	<ul style="list-style-type: none"> <li>Infrared image</li> <li>Visual image</li> <li>MSX</li> <li>Picture in picture (IR area on visual image)</li> </ul>
Gallery	Yes, incl. thumbnails and custom folder structure

P/N: 89401-0202

© 2020, FLIR Systems, Inc.

#89401-0202; r. 66090;

<b>Measurement</b>	
Object temperature range	-20 to 400°C (-4 to 752°F)
Accuracy at ambient temp. 15 to 35°C (59 to 95°F) and object temp. above 0°C (32°F)	0 to 100°C (32 to 212°F): ±3°C (±5.5°F)
	100 to 400°C (212 to 752°F): ±3%
<b>Measurement analysis</b>	
Measurement functions	<ul style="list-style-type: none"> <li>• Spot</li> <li>• Box with max./min.</li> </ul>
Measurements correction	<ul style="list-style-type: none"> <li>• Emissivity; matt/semi-matt/semi-glossy + custom value</li> <li>• Reflected apparent temperature <ul style="list-style-type: none"> <li>◦ Atmospheric compensation</li> </ul> </li> </ul>
Color palettes	<ul style="list-style-type: none"> <li>• Iron</li> <li>• Gray</li> <li>• Rainbow</li> <li>• Arctic</li> <li>• Lava</li> <li>• Rainbow HC</li> </ul>
<b>Set-up</b>	
Set-up commands	<ul style="list-style-type: none"> <li>• Local adaptation of units, language, date and time formats</li> <li>• Screen brightness (high, medium, low)</li> </ul>
Languages	Arabic, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, simplified Chinese, Spanish, Swedish, traditional Chinese, Turkish
<b>Service functions</b>	
Camera software update	<ul style="list-style-type: none"> <li>• Automatic over WiFi</li> <li>• USB via computer</li> </ul>
<b>Storage of images</b>	
Storage media	Built-in
Image storage capacity	> 5000 sets of images
Image file format	Standard JPEG, 14-bit measurement data included
<b>Image annotations</b>	
Text	Soft keyboard on touchscreen
<b>Digital camera</b>	
Resolution	5 MP
Focus	Fixed
Field of view	71.5 ° × 56° (84° diagonal)
Video lamp	Yes
<b>Data communication interfaces</b>	
Wi-Fi	802.11 a/ac/b/g/n (2.4 and 5 GHz)
USB	USB 2.0, Type-C connector
Bluetooth	PAN



## FLIR C5 (incl. Wi-Fi)

P/N: 89401-0202

© 2020, FLIR Systems, Inc.

#89401-0202; r. 66090;

<b>Power system</b>	
Battery type	Rechargeable Li ion battery (built-in)
Battery voltage	3.7 V
Battery capacity	1800 mAh
Battery operating time	4 hours
Battery charge life	>500 cycles
Charging system	USB-C (1 A)
Charging time	2 hours
Charging temperature	35°C (95°F)
External power operation	5 V, USB-C
Power management	Adjustable stand-by and automatic shut-down
<b>Environmental data</b>	
Operating temperature range	-10 to 50°C (14 to 122°F)
Storage temperature range	-40 to 70°C (-40 to 158°F)
Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity 25°C to 40°C (77°F to 104°F) / 2 cycles
Relative humidity	95% relative humidity 25°C to 40°C (77°F to 104°F) non-condensing
EMC	<ul style="list-style-type: none"> <li>EN 301 487-1</li> <li>EN 301 489-17</li> <li>FCC 47 CFR Part 15 Class B</li> </ul>
Magnetic fields	EN 61000-4-8 level 5
Radio spectrum	<ul style="list-style-type: none"> <li>ETSI EN 300 328</li> <li>EN 301 489</li> <li>FCC Title 47 CFR Part 15</li> <li>RSS-247 Issue 2</li> </ul>
Battery regulations	<ul style="list-style-type: none"> <li>UL 1642</li> <li>EN 62133 ed 2</li> </ul>
Battery charging efficiency	<ul style="list-style-type: none"> <li>BC Title 20</li> <li>10 CFR Section 430.23 (aa)</li> </ul>
Encapsulation	Camera housing and lens: IP 54 (IEC 60529)
Shock	25 g (IEC 60068-2-27)
Vibration	2 g (IEC 60068-2-6)
Drop	Designed for 2 m (6.56 ft)
Safety	EN 62368-1
Environmental safety	<ul style="list-style-type: none"> <li>REACH Regulation EC 1907/2006</li> <li>RoHS2 Directive 2011/65/EC</li> <li>WEEE Directive 2012/19/EC</li> <li>Proposition 65</li> </ul>
<b>Physical data</b>	
Weight (including battery)	0.19 kg (0.42 lb)
Size (L x W x H)	138 x 84 x 24 mm (5.4 x 3.3 x 0.94 in)
Battery weight	40 g (1.4 oz)
Tripod mounting	UNC 1/4"-20
Housing material	<ul style="list-style-type: none"> <li>PC and ABS, partially covered with TPE</li> <li>Aluminum</li> </ul>
Color	Black



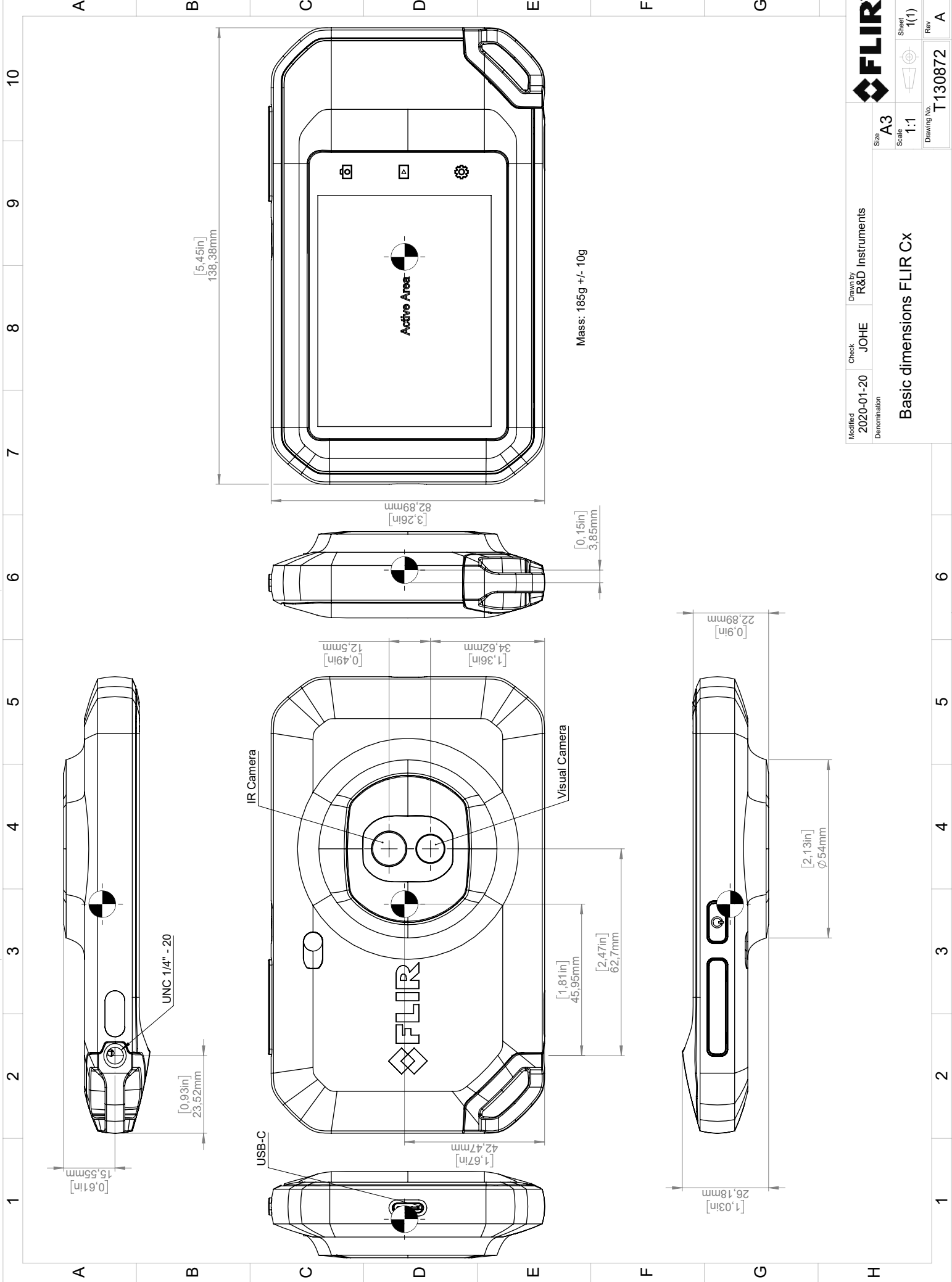
## FLIR C5 (incl. Wi-Fi)

**P/N: 89401-0202**

© 2020, FLIR Systems, Inc.

#89401-0202; r. 66090;

<b>Warranty and service</b>	
Warranty	<a href="http://www.flir.com/warranty/">http://www.flir.com/warranty/</a>
<b>Shipping information</b>	
Packaging, type	Cardboard box
Packaging, contents	<ul style="list-style-type: none"><li>• C5</li><li>• Printed documentation</li><li>• Wrist strap lanyard</li><li>• USB cable</li><li>• Pouch</li></ul>
Packaging, weight	0.52 kg (1.14 lb)
Packaging, size	160 × 118 × 93 mm (6.3 × 4.6 × 3.7 in)
EAN-13	4743254004467
UPC-12	845188021832
Country of origin	Estonia



Modified 2020-01-20	Check JOHE	Drawn by R&D Instruments	FLIR
Denomination <b>Basic dimensions FLIR Cx</b>			Sheet 1(1)
Size A3			Drawing No. T130872
Scale 1:1			Rev A

May 5, 2020 Täby, Sweden

AQ320383

**CE Declaration of Conformity – EU Declaration of Conformity**

Product: FLIR C5-series

Name and address of the manufacturer:

FLIR Systems AB

PO Box 7376

SE-187 15 Täby, Sweden

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

The object of the declaration: FLIR C5 -series (Product Model Name FLIR-C8940).

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

**Directives:**

Directive	2014/53/EU	Radio Equipment Directive (RED)
Directive:	2011/65/EU	RoHS and 2015/830/EU (Phtalates)

**Standards:**

EMC:	EN 55032:2015 v.2016-02	Electromagnetic compatibility multimedia eq
	EN 61000-4-8 v.2010-11	Power frequency magnetic field immunity test
	ETSI EN 301489-1 v2.2.3	ERM – EMC for radio equipment
	ETSI EN 301489-17 v3.2.0	ERM – EMC Wideband data
Radio:	ETSI EN 300 328 v2.2.2	Harmonized EN covering essential requirements of the R&TTE Directive
	ETSI EN 301 893 v.2.1.1	5GHz WLAN
SAR:	EN 50566:2017	Compliance with 30MHz to 6GHz
	EN 62209-2	Handheld and body-mounted devices
	IEEE 1528-2013	Wireless communication devices
Safety:	IEC/EN 62368-1:2014 (2 <sup>nd</sup> Ed) and Cor 1:2015	EN 62368-1:2014/AC:2015
	/A11:2017	Audio/video, information tech equipment
Restricted substances:	EN 50581:2012	Technical documentation

**FLIR Systems AB**

Quality Assurance

Lea Dabiri  
Quality Manager

**Test summary no.** 2019-08-30-01

**Information about the manufacturer**

**Name** PT. VARTA Microbattery (Indonesia)  
**Address** Batamindo Industrial Park  
Jalan Gaharu Lot 23, Jalan Angsana Lot 307-310  
Mukakuning Batam, Kepulauan Riau 29433, Indonesia

**Object of the declaration**

**Type of battery** Rechargeable lithium ion battery  
**Article** 1/LPP 683566 BE PCM WC – SOC 30%  
**Material no.** 725988 #  
**VKB no.** 56432 201 017  
**IEC Designation** 1ICP7/35/66  
**Voltage** 3.7V  
**Watt-hour rating** 7.0Wh  
**Mass (approx.)** 40g

The object of the declaration described above is in conformity with the requirements of the following document:

Documents No.	Title	Edition / Date of issue
ST/SG/AC.10/11/Rev.6	Recommendations on the Transport of Dangerous Goods, UN Manual of Tests and Criteria, Part III, subsection 38.3	2015

**Test Report**

**Document ref no.** JT70208  
**Document date** 2017-04-03

**List of Tests conducted and results**

Test Item	Test Result	Test Item	Test Result
T1. Altitude Simulation	Pass	T5. External Short-circuit	Pass
T2. Thermal Test	Pass	T6. Impact	Pass *
T3. Vibration	Pass	T7. Overcharge	Pass
T4. Shock	Pass	T8. Forced Discharge	Pass *

\* Reference to report of LPP 683566 BE cell

# Material No. 725988 is SOC 30% of Material No. 723947, equivalent to Material No. 718880 of test samples

**Test laboratory**

The tests were performed by the following test laboratory

<b>Name</b>	PT. VARTA Microbattery (Indonesia)
<b>Address</b>	Application Test Lab Batamindo Industrial Park Jalan Angsana Lot 310 Mukakuning Batam Kepulauan Riau 29433 Indonesia
<b>Phone</b>	+62 770611099
<b>E-mail</b>	<a href="mailto:info@varta-microbattery.com">info@varta-microbattery.com</a>
<b>Website</b>	<a href="http://www.varta-microbattery.com">www.varta-microbattery.com</a>

VARTA Microbattery Pte Ltd  
300 Tampines Avenue 5  
#05-01 Tampines Junction  
Singapore 529653

Phone : (65) 6260 5801  
Fax : (65) 6260 5812  
[info@varta-microbattery.com](mailto:info@varta-microbattery.com)  
[www.varta-microbattery.com](http://www.varta-microbattery.com)  
RCB (Certificate of Incorporation) No. 197201703K

Page no.: 1 of 2

---

**Additional information**

In original VARTA packaging the products comply with the following special provisions of international transport regulations:

- IATA DGR: Packing Instruction 965 Section IB (max. 30 % state of charge)  
(Transportations of cells or batteries packed with equipment or contained in equipment  
have to follow Packing Instructions 966 or 967 Section II.)
- ADR/RID/ADN/IMDG Code: Special Provision 188
- DOT / 49 CFR: §173.185 (c)

The products have been manufactured under a quality management programme according to IATA DGR clause 3.9.2.6.1 (e), ADR clause 2.2.9.1.7 (e) and IMDG code clause 2.9.4.5.

---

Singapore, 30 August 2019  
(place and date of issue)



(company stamp)



---

(signature)  
(Low Chee Leong)  
Manager  
Technical Support