FLIR CM55

P/N: CM55

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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.

Part number	CM55
Name	Flex Clamp Meter with Bluetooth
Description	10″ (25 cm) 3000 A true RMS AC flexible current clamp meter with Bluetooth

The FLIR Flex Clamp Meters with Bluetooth are ergonomic tools designed to simplify difficult current measurements. Made with a narrow flexible coil clamp, the FLIR CM55 and CM57 let you easily take measurements in tight or awkward spots—a difficult task with a traditional hard jaw clamp meter. With Bluetooth communication for remote viewing and data transfer to iOS and Android devices via the FLIR Tools Mobile app, you can analyze and share data fast right from the job site.

Take accurate measurements in tight or awkward spots—tricky conductors conquered:

- Snake the coil around obstacles with ease, even in deep, crowded cabinets.
- True RMS AC up to 3000 A for multiple conductor measurements.
- Inrush current function for equipment start-up spikes.

Easy inspection and navigation—designed with your convenience in mind:

- Standalone flexible clamp meter displays the readings you need.
- Bright, dual-LED worklights provide built-in illumination for dark cabinets.
- Drop tested to 3 m, portable, lightweight, and tangle free without compromising measurement range.

Remote viewing from a safe distance—transfer and view data on mobile devices with the FLIR Tools Mobile app:

- Connect to iOS and Android smartphones or tablets.
- Multiple units wirelessly connect for remote viewing of multiphase systems.
- Data recording for trend analysis transferable via Bluetooth.

Measurement	
Maximum AC	3000 A AC
AC response	True RMS
AC ranges and resolution	30.00 A, 300.0 A, 3000 A
Basic AC accuracy (of reading)	±3.0% + 5 digits
Maximum resolution	0.01 A
Measurement rate	1.5 samples per second, nominal
Display rate	2 times per second
AC bandwidth	45–500 Hz (sine wave)
Inrush current	Minimum 0.5 A, 100 mS
Data record mode	20 000 points , 1 minute sample rate

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Measurement	
Detailed accuracy	30.00 A ± (3.0% + 5 digits), 300.0 A ± (3.0% + 5 digits), 3000 A ± (3.0% + 5 digits)
Positional error (distance from optimum)	15 mm (0.6″) ± 2.0%, 25 mm (1.0″) ± 2.5%, 35 mm (1.4″) ± 3.0%

Meter data	
Display	3000-count LCD with backlight and multi-function indicators
Maximum conductor diameter	6 cm (2.4″)
Flex cable length	25 cm (10″)
Coil bend radius	38.1 mm (1.5″)
Coil diameter	7.5 mm (0.3″)
Coil tip diameter	13 mm (0.5″)
Display indications	Progressive low battery, over range, hold
Work light	Two white LEDs
Bluetooth range (maximum)	10 m (32′)
Wireless ID# (maximum)	Up to 20

Power system	
Power supply	2 × 1.5 V AAA
Battery life	100 hours with alkaline batteries (calculated)
Auto power off	Approximately 10 minutes after power on or disable

Environmental	
Drop test	3 m (9.8′)
IP rating	IP54 dust-protected and splash-resistant
Maximum operating altitude	2000 m (6562′)
Operating temperature	0–50°C (32–122°F)
Operating humidity	Maximum 80% up to 35°C (95°F) decreasing linearly to 60% at 45°C (113°F)
Temperature coefficient	0.2 × specified accuracy/°C, <64.5°F (18°C), >82.4°F (28°C)
Storage temperature	–20 to +60°C (–4 to +140°F) without batteries
Storage humidity	80% relative humidity (maximum)

Certifications	
Agency approvals	RCM, CSA, KC
Safety compliance	CAT IV—600 V, CAT III—1000 V
Standards	EN61010-1, EN61010-2-032, EN61326-1

Physical data	
Dimensions (W × H × D)	120 mm × 280 mm × 25 mm (4.7″ × 11.0″ × 1.0″)
Weight	170 g (6.0 oz.) with batteries

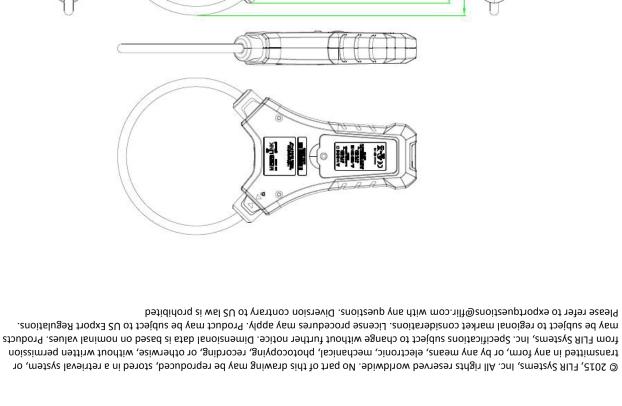| Warranty	
Warranty	https://www.flir.com/testwarranty

FLIR CM55

Shipping	
Packaging type	Color box
Packaging contents	CM55, 2 × AAA 1.5 V Energizer batteries, quick start guide, user manual on CD
Packaging weight	0.56 kg
Packaging dimensions (L × W × H)	32 cm × 18.5 cm × 6.8 cm
Inner carton quantity	3
Inner carton weight	1.94 kg
Inner carton dimensions (L × W × H)	59.5 cm × 6.3 cm × 20.3 cm
Master carton quantity	12
Master carton weight	9.5 kg
Master carton dimensions (L × W × H)	61 cm × 50 cm × 22 cm
EAN-13	0793950370551
UPC-12	793950370551
Country of origin	Taiwan
Tariff code	9030310000

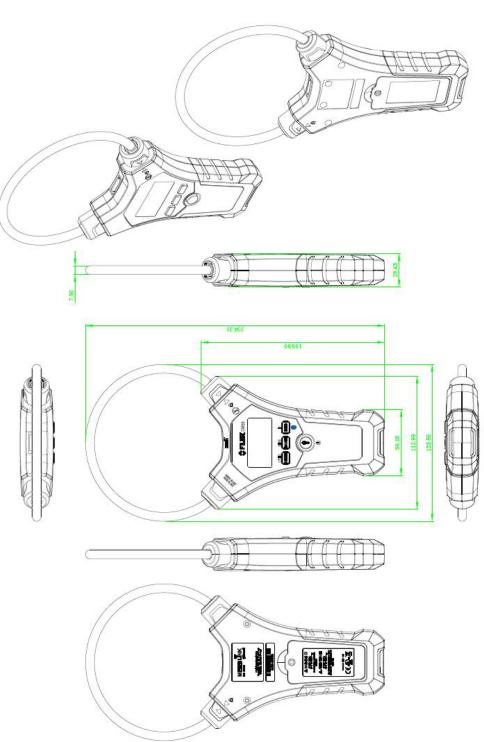| Technical support	
Website	http://support.flir.com

Supplies & accessories:

- TA03-KIT; NiMH Rechargeable Battery Kit
- TA10-F; Protective Case for DM9x and TA72/74 Series
- TA15; Universal Soft Sided Case
- TA55; AC Current Line splitter

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Modified Date	Modified By
Thursday, April 23, 2015	T&M Engineering
Description	
FLIR CM55 Flex Clamp Meter	

Teledyne FLIR LLC - EXTECH BRAND

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

Declaration of Conformity

Extech Model: **CM55**
Description: **Flexible Clamp Meter, AC, True RMS, 10"**
Date of Issue: **30-Sep-21**

We, FLIR Commercial Systems, Inc. - Extech Brand, 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   **2004/108/EC**
EMC Report #   **R10648778-E1**
Report Date of Issue: **5/12/2015**

Standards:
IEC 61326-1:2012 (2nd Edition)

RED Directive   **2014/53/EU**
RED Report #   **R10648778-E5**
Report Date of Issue: **5/22/2015**

Standards:
EN 301 489-17 v2.2.1

LVD Directive   **2014/35/EU**
Report Number: **E201687-A16-CB-1**
Report Date of Issue: **4/23/2015**

Standards:
IEC 61010-1 (ed.3)
IEC 61010-2-032 (ed.3)

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 their European authorized representative) can in their EC Declaration of Conformity verify compliance with the EC Low Voltage Directive, EMC Directive, RED Directive, and RoHS Directive.

Mark Sultzbach / QA Manager

UK Declaration of Conformity

Product: FLIR CM55

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 CM55

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 61326-1	2014/30/EU	EN 61326-1:2012 (2nd Ed)
S.I. 2016 No. 1091	EN 301 489	2014/30/EU	EN 301 489-17 V2.2.1
LVD Directive		**LVD Directive**	
S.I. 2016 No. 1101	IEC 61010-1 (Ed. 3)	2014/35/EU	IEC 61010-1 (Ed. 3)
S.I. 2016 No. 1101	IEC 61010-1-032 (Ed. 3)	2014/35/EU	IEC 61010-2-032 (Ed. 3)
RoHS			
S.I. 2012 No. 3032	EN 50581:2012	2015/65/EU (RoHS)	EN 50581:2012

* https://www.gov.uk/guidance/designated-standards 2021-03-19
Designated standards: EMC – consolidated list, version 1, 1 January 2021
Designated standards: RoHS – consolidated list, version 1, 1 January 2021
Designated standards: low voltage – notice of publication, 1 January 2021

FLIR Commercial Systems
Quality Assurance

Hank Tsai
Quality Manager