

P/N: CM74

Copyright

© 2021, 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.: CM74

Commit: 80050

Language:

Modified: 2021-10-18

Formatted: 2021-10-18

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	
Part number	CM74
Part name	Commercial 600A AC/DC Clamp Meter
<p>The FLIR CM74 600A AC/DC Clamp Meter give you better access to wiring in hard-to-reach places, and provides all the measurement capabilities you need for advanced troubleshooting. Made with a narrow jaw and high-powered LED worklights, the FLIR CM74 makes it easier to take measurements in dark, crowded panels and cabinets. Its slim, light design is convenient to carry in your pocket wherever you go. With advanced electrical features including auto-ranging, true RMS voltage and current, LoZ, inrush, VFD Mmode, and an input for a flexible current probe accessory, the FLIR CM74 has all the measurement functions you need to stay competitive and ensure accurate readings.</p>	
<p>Better clamp access and portability:</p> <ul style="list-style-type: none"> • Take measurements in hard-to-reach places, and carry the clamp wherever you go. • Made with a narrow jaw for easy access to wiring in crowded panels and cabinets. • Slim clamp design makes it convenient to carry in your pocket. • Dual bright high-powered LED worklights guide you to your target in poor lighting conditions. 	
<p>All the electrical features you need:</p> <ul style="list-style-type: none"> • Tackle modern challenges, get accurate readings. • Advanced electrical features including true RMS, LoZ, and smart diode with disable. • Expandable to 3000 A AC with the FLIR TA72 and TA74 Flex Clamp Accessories (sold separately). • Minimum/maximum, hold, and auto power off with disable. 	
<p>Engineering you can have confidence in:</p> <ul style="list-style-type: none"> • Built rugged, and includes accessories to make troubleshooting easier. • Premium gold-tipped silicone test lead accessories included. • Large-digit LCD display with a bright backlight. • Rubberized double molded hand grips to reduce slippage. 	
Electrical measurement	
True RMS voltage and current	Yes
Auto-ranging	Yes, with manual range option
DC V range	60.00 V, 600.0 V, 1000 V
DC V accuracy	± (1.0% + 5 dgt)
AC V range	60.00 V, 600.0 V, 1000 V
AC V accuracy	±(1.0% + 5 dgt) 45–400 Hz
AC V VFD range	60.00 V, 600.0 V, 1000 V
AC V VFD accuracy	±(1% + 5 dgt) 45–65 Hz, ±(5% + 5 dgt) 65–400 Hz



FLIR CM74: Commercial 600A AC/DC Clamp Meter

P/N: CM74

© 2021, FLIR Systems, Inc.

#CM74; r. 80050;

Electrical measurement	
LoZ range	60.00 V, 600.0 V, 1000 V
LoZ accuracy	±(1% + 5 dgt) 45–65 Hz, ±(5% + 5 dgt) 65–400 Hz
LoZ input impedance	2.5kΩ
AC A range	60.00 A, 600.0 A
AC A accuracy	±(2% + 5 dgt) 45–65Hz, ±(2% + 5 dgt) 65–400Hz
AC A VFD range	60.00 A, 600.0 A
AC A VFD accuracy	±(2% + 5 dgt) 45–65Hz, ±(6% + 5 dgt) 65–400Hz
AC A inrush range and accuracy	60.00 A ± (3% + 0.3 A), 600.0 A ± (3% + 5 dgt)
DC A range	60.00 A, 600.0 A
DC A accuracy	±(2% + 5 dgt)
Frequency range	600.0 Hz, 6.000 kHz, 60.00 kHz
Frequency accuracy	±(0.1% + 2 dgt)
Resistance range	600.0 Ω, 6.000 kΩ
Resistance	±(1.0% + 5 dgt)
Continuity	600.0 Ω ± (1.0% + 5 dgt)
Diode	1.5V ± (1.5% + 5 dgt)
Capacitance	1–1000 μF ± (1.0% + 4 dgt)
Flex input AC A range	30.00 A, 300.0 A, 3000 A
Flex input AC A accuracy	±(1% + 5 dgt) 45–400Hz
Flex input Frequency range	600.0 Hz, 6.000 kHz, 10.00 kHz
Flex input AC A accuracy	±(0.1% + 2 dgt)
Additional measurement functions	Integrated VFD mode, DCA zero, data hold, minimum/maximum

General	
Worklights	Dual white LEDs
Jaw opening:	35 mm (1.38 in.)
Display Counts	0–6000
Measuring rate:	3 times per second
Calibration Cycle	1 year calibration cycle recommended
Auto Power Off	10 minutes with disable
Power Source	4 × 1.5 V AAA alkaline batteries.
Battery Life	65 hours (with alkaline batteries and backlight/worklight off)

Environmental data	
Operational temperature	–10 to +10°C (14–50°F) (non-condensing) 10–30°C (50–86°F) (≤80% relative humidity (RH)) 30–40°C (86–104°F) (≤75% RH) 40–50°C (104–122°F) (≤45% RH)
Storage temperature	–20 to +60°C (4–140°F)
Relative humidity	0–80% RH (batteries not installed)
Temperature coefficient:	0.2 × (specified accuracy)/°C, <18°C (64.4°F), >28°C (82.4°F)
Operating altitude:	2000 m (6562 ft.)
Pollution degree	2



FLIR CM74: Commercial 600A AC/DC Clamp Meter

P/N: CM74

© 2021, FLIR Systems, Inc.

#CM74; r. 80050;

Physical data	
Dimensions: (D x W x L):	43 mm x 89 mm x 241 mm (1.7 in. x 3.5 in. x 9.5 in.)
Weight	426 g (15.0 oz.) including batteries

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

Certifications	
Certifications	UL, cUL
Safety category rating	EN 61010-1 CAT IV-600 V, CAT III-1000 V, EN 61010-2-032

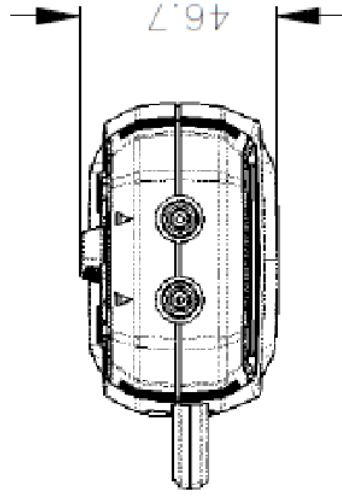
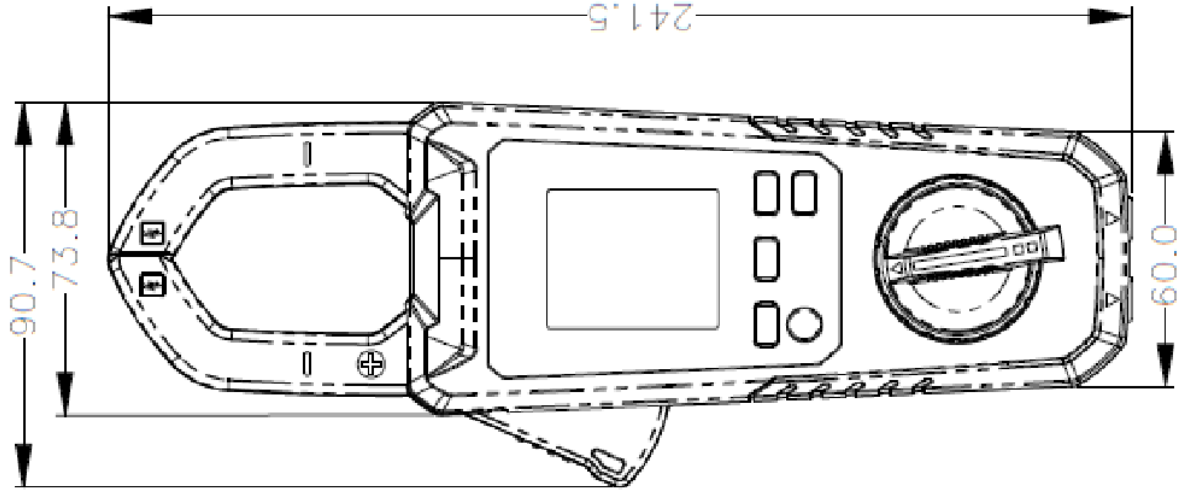
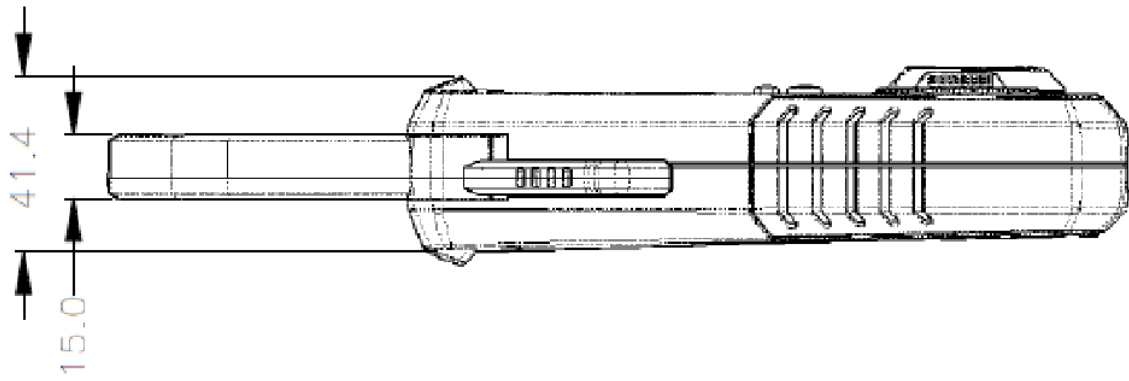
Shipping information	
Packaging type	Retail color box
Packaging contents	CM74, 4 x AAA batteries, premium CAT IV silicone test leads, quick start guide, user manual (CD), warranty registration card
Packaging weight	0.9 kg (2 lb.)
Packaging dimensions (H x W x L)	33 cm x 14 cm x 10.7 cm (13 in. x 5.5 in. x 4.3 in.)
Master carton weight	11.8 kg (26.1 lbs.)
Master carton dimensions (H x W x L)	62.3 cm x 29.3 cm x 36.1 cm (24.6 in. x 11.6 in. x 14.3 in.)
Master carton quantity	12
UPC	793950370742
EAN	0793950370742
Country of origin	Taiwan
Tariff code	9030.31.0000

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

Supplies & accessories:

- TA03-KIT; NiMH Rechargeable Battery Kit
- TA11; Protective case for CM7x and CM8x Series
- TA15; Universal Soft Sided Case
- TA42; TA42 Belt Clip
- TA52; TA52 Magnetic Meter Mount
- TA55; AC Current Line splitter
- TA70; CAT IV Insulated Alligator Probes
- TA72; Large Universal Flex Current Probe Accessory (25 cm)
- TA74; Large Universal Flex Current Probe Accessory (45 cm)
- TA80; CAT IV Silicone Test Leads

© 2015, FLIR Systems, Inc. All rights reserved worldwide. No part of this drawing may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from FLIR Systems, Inc. Specifications subject to change without further notice. Dimensional data is based on nominal values. Products may be subject to regional market considerations. License procedures may apply. Product may be subject to US Export Regulations. Please refer to exportquestions@flir.com with any questions. Diversion contrary to US law is prohibited.



Modified Date Thursday, October 29, 2015	Modified By T&M Engineering
Description CM74	
Units Millimeters	Scale Not to Scale

Teledyne FLIR LLC

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

Declaration of Conformity

Extech Model: CM74

Description: Clamp Meter, 600A, AC/DC

Date of Issue: 30-Sep-21

We, Teledyne FLIR LLC, 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

EMC Directive: 2014/30/EU

Report Number: 10994890

Report Date of Issue: 5/19/2016

Standards:

EN 61326:2013
EN 61326-2-2:2013

LVD Directive: 2014/35/EU

Report Number: E201687-A18-CB-1

Report Date of Issue: 9/26/2016

Standards:

IEC 61010-1 (Ed 3)
IEC 61010-2-032 (Ed 3)
IEC 61010-2-033 (Ed 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 and EMC 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 and EC EMC Directive and RoHS Directive.



Mark Sultzbach / QA Manager

Taipei, Taiwan Oct 6, 2021

UK Declaration of Conformity

Product: FLIR CM74

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 CM74

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			
S.I. 2016 No. 1091	EN 61326-1	2014/30/EU	EN 61326-1:2012 (2 nd Ed)
S.I. 2016 No. 1091	EN 61326-2-2:2013	2014/30/EU	EN 61326-2-2:2013
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)
S.I. 2016 No. 1101	IEC 61010-1-033 (Ed. 1)	2014/35/EU	IEC 61010-2-033 (Ed. 1)
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: RoHS – consolidated list, version 1, 1 January 2021

FLIR Commercial Systems

Quality Assurance



Hank Tsai
Quality Manager