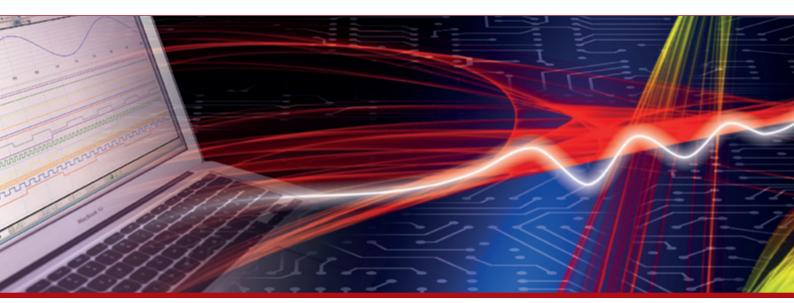


### **Product Datasheet - Technical Specifications**



More information in our Web-Shop at ▶ www.meilhaus.com

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#### P/N: DM166

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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	DM166
Part name	Thermal Imaging TRMS Multimeter with IGM

The FLIR DM166 is FLIR's most affordable multimeter with built-in thermal imaging to date—a must-have tool for commercial electricians and automation, electronics, and HVAC technicians. Featuring Infrared Guided Measurement (IGM) powered by an  $80\times60$  FLIR thermal imager, the FLIR DM166 visually guides you to the precise location of temperature anomalies and potential problems fast, safely, and efficiently. The feature-packed multimeter is an ideal tool for troubleshooting and diagnosing complex issues in both high and low-voltage applications.

#### Troubleshoot faster:

- One tool gets the job done.
- · Equipped with IGM to quickly scan for overheating components.
- Broad DMM test functions to troubleshoot and diagnose the fault.
- The unique combination of onboard thermal imaging and traditional DMM test functions makes troubleshooting easier.

#### Work safer:

- Identify energized and potentially faulty equipment from a safe distance.
- Non-contact temperature measurement.
- Integrated non-contact voltage detection.
- CAT III—600 V, CAT IV—300 V safety ratings.

#### Diagnose problems more efficiently and effectively:

- Rich feature set covers both high- and low-voltage applications.
- 600 V AC/DC voltage measurements and 10 A AC/DC current measurements.
- Variable-frequency drive (VFD) measurement function.
- Measures resistance up to 60 M $\Omega$ , frequency up to 50 kHz, capacitance up to 10 000  $\mu$ F, and continuity/diode.

Thermal imaging	
Detector type	FLIR Lepton; micro-bolometer focal plane array (FPA)
Infrared (IR) imaging resolution (V $\times$ H)	80 × 60 pixels
IR imaging field of view (V $\times$ H)	50° × 38°
IR imaging spectral response	8–14 μm
Thermal sensitivity	150 mK (0.15°C)
IR image capture frequency	9 Hz
IR image color palettes	Rainbow, Iron, Gray scale
Laser pointer type	Class I (red)



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Laser pointer power		
Remperature measurement range	Thermal imaging	
Over- and under-range indication         OL           Temperature reading stabilization         No startup delay           IR temperature resolution         0.1°C (0.1°F)           IR temperatures accuracy         ±3°C (5.4°F) or ±3% of the reading (whichever is greater) for temperatures > 25°C (77°F), ±5°C for temperature > 25°C (77°F), ±5°C for temperatures > 25°C (77°C, ±5°C (77°C), ±5°C (77°C), ±5°C (77°C), ±5°C (77°C), ±5°C (77°C), ±5°C (77°C), ±5°C (77°C	Laser pointer power	<0.4 mW
Temperature reading stabilization   No startup delay     IR temperature resolution   0.1°C (0.1°F)     IR temperature accuracy   ±3°C (5.4°F) or ±3% of the reading (whichever is greater) for temperatures > 25°C (77°F), ±5°C for temperatures > 25°C (77°F), ±5°C for temperatures > 25°C (14-77°F)     Distance-to-spot (D:S) ratio   30·1     Emissivity adjustment   0.95 maximum, 4 presets plus a custom setting (0.10-0.99)     Targeting   Displayed cross-hairs pinpoint the center of the measurement spot     Hold   Image with measurement     Electrical measurement     Display count   6000     AC/DC V   600 V AC RMS or 600 V DC ± 0.7%/0.5%     AC/DC MV   600.0 mV ± 1%/0.3%     VFD AC V   600 V AC RMS or 600 V DC ± 0.7%/0.5%     AC/DC MA CA   10.00 A AC RMS or 10.00 A DC ± 1.0%/0.7%     AC/DC MA range   600.0 mA ± 1.0%/0.7%     Frequency counter   50 kHz ± 0.03%     Resistance   6.000 MΩ ± 0.9%     Resistance   6.000 MΩ ± 0.9%     Continuity check threshold   30–480 Ω     Diode test   3.000 V ± 0.9%     Capacitance   2.000 mF ± 5.0%     Acpacitance   2.000 mF ± 5.0%     Acpacitance   5 samples per second     Accuracy is given as ± (% of reading)     Meter data   Category rating   CAT IV—300 V, CAT III—600 V     Prating   IP40	IR temperature measurement range	-10 to 150°C (14-302°F)
IR temperature resolution	Over- and under-range indication	OL
#3°C (5.4°F) or ± 3% of the reading (whichever is greater) for temperatures > 25°C (77°F), ±5°C for temperatures - 10°C to 25°C (14-77°F)  Distance-to-spot (D:S) ratio  20:1  Emissivity adjustment  0.95 maximum, 4 presets plus a custom setting (0.10-0.99)  Targeting  Displayed cross-hairs pinpoint the center of the measurement spot  Hold  Image with measurement  Display count  6000  AC/DC V  600 V AC RMS or 600 V DC ± 0.7%/0.5%  AC/DC mV  6000 V AC RMS or 600 V DC ± 0.7%/0.5%  AC/DC mV  6000 NA C RMS or 10.00 A DC ± 1.0%/0.7%  AC/DC MA 10.00 A AC RMS or 10.00 A DC ± 1.0%/0.7%  AC/DC MA range  600.0 mA ± 1.0%/0.7%  600.0 mA ± 1.0%/0.7%  600.0 mA ± 1.0%/0.7%  AC/DC MA range  600.0 mA ± 1.0%/0.0 MD ± 1.5%/1.0%  Frequency counter  50 kHz ± 0.03%  Resistance  6.000 MΩ ± 0.9%, 60.00 MΩ ± 1.5%  Continuity check threshold  30-480 Ω  Dioide test  3.000 V ± 0.9%  Capacitance  2.000 mF ± 2.0%, 10.00 mF ± 5.0%  Temperature, type K thermocouple  -40 to 400°C DMM ± (1.0% + 1.5°C) (-40 to 752° F DMM ± (1.0% + 3°F))  Measuring rate  Accuracy is given as ± (% of reading)  Meter data  CAT IV—300 V, CAT III—600 V  IP rating  Drop test  3 m (9.8 ft.)  Warranty  https://www.flir.com/testwarranty  Calibration cycle  Certifications  C-UL-US, CE, RCM  Safety standards compliance  Fower requirements  Optional TAO4 lithium polymer rechargeable battery system	Temperature reading stabilization	No startup delay
greater) for temperatures > 25°C (7"F), ±5°C for temperatures - 10°C to 25°C (14-77°F)	IR temperature resolution	0.1°C (0.1°F)
Emissivity adjustment         0.95 maximum, 4 presets plus a custom setting (0.10~0.99)           Targeting         Displayed cross-hairs pinpoint the center of the measurement spot           Hold         Image with measurement           Electrical measurement         6000           Display count         6000           AC/DC V         600 V AC RMS or 600 V DC ± 0.7%/0.5%           AC/DC mV         600.0 mV ± 1%/0.3%           VFD AC V         600 V AC RMS, 10~100Hz, ± 1%           AC/DC A         10.00 A AC RMS or 10.00 A DC ± 1.0%/0.7%           AC/DC mA range         600.0 mA ± 1.0%/0.7%           AC/DC µA range         6000 µA AC RMS or 6000 µA DC ± 1.5%/1.0%           Frequency counter         50 kHz ± 0.03%           Resistance         6.000 MΩ ± 0.9%, 60.00 MΩ ± 1.5%           Continuity check threshold         30~480 Ω           Diode test         3.000 V ± 0.9%           Capacitance         2.000 mF ± 2.0%, 10.00 mF ± 5.0%           Temperature, type K thermocouple         ~40 to 400°C DMM ± (1.0% + 1.5°C) (~40 to 752° FDMM ± (1.0% + 3°F))           Measuring rate         5 samples per second           Accuracy is given as ± (% of reading)         Temperature, type K thermocouple propersecond           Meter data         Cat IV—300 V, CAT III—600 V           UP rating         IP ratin	IR temperature accuracy	greater) for temperatures > 25°C (77°F), ±5°C for
(0.10~0.99)	Distance-to-spot (D:S) ratio	30:1
measurement spot	Emissivity adjustment	
Electrical measurement   6000	Targeting	
Display count	Hold	Image with measurement
AC/DC V   600 V AC RMS or 600 V DC ± 0.7%/0.5%	Electrical measurement	
AC/DC mV $600.0 \text{ mV} \pm 1\%/0.3\%$ VFD AC V $600 \text{ V AC RMS}, 10-100\text{Hz}, \pm 1\%$ AC/DC A $10.00 \text{ A AC RMS or } 10.00 \text{ A DC} \pm 1.0\%/0.7\%$ AC/DC mA range $600.0 \text{ mA} \pm 1.0\%/0.7\%$ AC/DC μA range $6000 \text{ uA AC RMS or } 6000 \text{ uA DC} \pm 1.5\%/1.0\%$ Frequency counter $50 \text{ kHz} \pm 0.03\%$ Resistance $6.000 \text{ M}\Omega \pm 0.9\%, 60.00 \text{ M}\Omega \pm 1.5\%$ Continuity check threshold $30-480 \Omega$ Diode test $3.000 \text{ V} \pm 0.9\%$ Capacitance $2.000 \text{ mF} \pm 2.0\%, 10.00 \text{ mF} \pm 5.0\%$ Temperature, type K thermocouple $-40 \text{ to } 400^{\circ}\text{ C DMM} \pm (1.0\% + 1.5^{\circ}\text{C}) (-40 \text{ to } 752^{\circ}\text{ F DMM} \pm (1.0\% + 3^{\circ}\text{F}))$ Measuring rate $5 \text{ samples per second}$ Accuracy is given as $\pm (\% \text{ of reading})$ Meter data $CAT \text{ IV} -300 \text{ V, CAT III} -600 \text{ V}$ LiP ratingIP40Drop test $3 \text{ m } (9.8 \text{ ft.})$ Warranty $1100000000000000000000000000000000000$	Display count	6000
VFD AC V         600 V AC RMS, 10–100Hz, ± 1%           AC/DC A         10.00 A AC RMS or 10.00 A DC ± 1.0%/0.7%           AC/DC mA range         600.0 mA ± 1.0%/0.7%           AC/DC μA range         6000 uA AC RMS or 6000 uA DC ± 1.5%/1.0%           Frequency counter         50 kHz ± 0.03%           Resistance         6.000 MΩ ± 0.9%, 60.00 MΩ ± 1.5%           Continuity check threshold         30–480 Ω           Diode test         3.000 V ± 0.9%           Capacitance         2.000 mF ± 2.0%, 10.00 mF ± 5.0%           Temperature, type K thermocouple         -40 to 400°C DMM ± (1.0% + 1.5°C) (-40 to 752° F DMM ± (1.0% + 3°F))           Measuring rate         5 samples per second           Accuracy is given as ± (% of reading)         5 samples per second           Meter data         Category rating           Category rating         CAT IV—300 V, CAT III—600 V           IP rating         IP40           Drop test         3 m (9.8 ft.)           Warranty         https://www.flir.com/testwarranty           Calibration cycle         Once per year, recommended           Certifications         C-UL-US, CE, RCM           Safety standards compliance         IEC 61010-1 CAT IV—600 V, CAT III—1000 V           Power requirements         3 × AA Energizer L91 lithium (Li/FeS2) batteries or optional TAO4 l	AC/DC V	600 V AC RMS or 600 V DC ± 0.7%/0.5%
AC/DC A $10.00 \text{ A AC RMS or } 10.00 \text{ A DC} \pm 1.0\%/0.7\%$ AC/DC mA range $600.0 \text{ mA} \pm 1.0\%/0.7\%$ AC/DC μA range $6000 \text{ uA AC RMS or } 6000 \text{ uA DC} \pm 1.5\%/1.0\%$ Frequency counter $50 \text{ kHz} \pm 0.03\%$ Resistance $6.000 \text{ MΩ} \pm 0.9\%, 60.00 \text{ MΩ} \pm 1.5\%$ Continuity check threshold $30-480 \Omega$ Diode test $3.000 \text{ V} \pm 0.9\%$ Capacitance $2.000 \text{ mF} \pm 2.0\%, 10.00 \text{ mF} \pm 5.0\%$ Temperature, type K thermocouple $-40 \text{ to } 400^{\circ}\text{C DMM} \pm (1.0\% + 1.5^{\circ}\text{C}) (-40 \text{ to } 752^{\circ}\text{ F DMM} \pm (1.0\% + 3^{\circ}\text{F}))$ Measuring rate $5 \text{ samples per second}$ Accuracy is given as $\pm$ (% of reading)Meter dataCategory ratingCategory ratingCAT IV—300 V, CAT III—600 VIP ratingIP40Drop test $3 \text{ m } (9.8 \text{ ft.})$ Warranty $1100000000000000000000000000000000000$	AC/DC mV	600.0 mV ± 1%/0.3%
AC/DC mA range       600.0 mA ± 1.0%/0.7%         AC/DC μA range       6000 uA AC RMS or 6000 uA DC ± 1.5%/1.0%         Frequency counter       50 kHz ± 0.03%         Resistance       6.000 MΩ ± 0.9%, 60.00 MΩ ± 1.5%         Continuity check threshold       30–480 Ω         Diode test       3.000 V ± 0.9%         Capacitance       2.000 mF ± 2.0%, 10.00 mF ± 5.0%         Temperature, type K thermocouple       -40 to 400°C DMM ± (1.0% + 1.5°C) (-40 to 752° F DMM ± (1.0% + 3°F))         Measuring rate       5 samples per second         Accuracy is given as ± (% of reading)       CAT IV—300 V, CAT III—600 V         IP rating       IP40         Drop test       3 m (9.8 ft.)         Warranty       https://www.flir.com/testwarranty         Calibration cycle       Once per year, recommended         Certifications       C-UL-US, CE, RCM         Safety standards compliance       IEC 61010-1 CAT IV—600 V, CAT III—1000 V         Power system       Power requirements         Power requirements       3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	VFD AC V	600 V AC RMS, 10-100Hz, ± 1%
AC/DC μA range 6000 uA AC RMS or 6000 uA DC ± 1.5%/1.0%  Frequency counter 50 kHz ± 0.03%  Resistance 6.000 MΩ ± 0.9%, 60.00 MΩ ± 1.5%  Continuity check threshold 30–480 Ω  Diode test 3.000 V ± 0.9%  Capacitance 2.000 mF ± 2.0%, 10.00 mF ± 5.0%  Temperature, type K thermocouple -40 to 400°C DMM ± (1.0% + 1.5°C) (-40 to 752° F DMM ± (1.0% + 3°F))  Measuring rate 5 samples per second  Accuracy is given as ± (% of reading)  Meter data  Category rating CAT IV—300 V, CAT III—600 V  IP rating IP40  Drop test 3 m (9.8 ft.)  Warranty https://www.flir.com/testwarranty  Calibration cycle Once per year, recommended  Certifications  Certifications  Certifications  C-UL-US, CE, RCM  Safety standards compliance IEC 61010-1 CAT IV—600 V, CAT III—1000 V  Power system  Power requirements 3 × AA Energizer L.91 lithium (Li/FeS₂) batteries or optional TA04 lithium polymer rechargeable battery system	AC/DC A	10.00 A AC RMS or 10.00 A DC ± 1.0%/0.7%
Frequency counter $50  \text{kHz} \pm 0.03\%$ Resistance $6.000  \text{M}\Omega \pm 0.9\%,  60.00  \text{M}\Omega \pm 1.5\%$ Continuity check threshold $30-480  \Omega$ Diode test $3.000  \text{V} \pm 0.9\%$ Capacitance $2.000  \text{mF} \pm 2.0\%,  10.00  \text{mF} \pm 5.0\%$ Temperature, type K thermocouple $-40  \text{to}  400^{\circ} \text{C DMM} \pm (1.0\% + 1.5^{\circ} \text{C})  (-40  \text{to}  752^{\circ}  \text{F DMM} \pm (1.0\% + 3^{\circ} \text{F}))$ Measuring rate $5  \text{samples per second}$ Meter data  Category rating $CAT  \text{IV} - 300  \text{V},  CAT  \text{III} - 600  \text{V}$ IP rating $IP40$ Drop test $3  \text{m}  (9.8  \text{ft.})$ Warranty $1P40$ Drop test $3  \text{m}  (9.8  \text{ft.})$ Matriation cycle $1P40$ Certifications $1P40$ Certification	AC/DC mA range	600.0 mA ± 1.0%/0.7%
Resistance $6.000 \text{ M}\Omega \pm 0.9\%, 60.00 \text{ M}\Omega \pm 1.5\%$ Continuity check threshold $30-480 \Omega$ Diode test $3.000 \text{ V} \pm 0.9\%$ Capacitance $2.000 \text{ mF} \pm 2.0\%, 10.00 \text{ mF} \pm 5.0\%$ Temperature, type K thermocouple $-40 \text{ to } 400^{\circ}\text{C DMM} \pm (1.0\% + 1.5^{\circ}\text{C}) (-40 \text{ to } 752^{\circ}\text{ F DMM} \pm (1.0\% + 3^{\circ}\text{F}))$ Measuring rate $5 \text{ samples per second}$ Accuracy is given as $\pm$ (% of reading)         Meter data       CAT IV—300 V, CAT III—600 V         IP rating       IP40         Drop test $3 \text{ m } (9.8 \text{ ft.})$ Warranty       https://www.flir.com/testwarranty         Calibration cycle       Once per year, recommended         Certifications       C-UL-US, CE, RCM         Safety standards compliance       IEC 61010-1 CAT IV—600 V, CAT III—1000 V         Power system $3 \times AA$ Energizer L91 lithium (Li/FeS₂) batteries or optional TA04 lithium polymer rechargeable battery system	AC/DC μA range	6000 uA AC RMS or 6000 uA DC ± 1.5%/1.0%
Continuity check threshold       30–480 Ω         Diode test       3.000 V ± 0.9%         Capacitance       2.000 mF ± 2.0%, 10.00 mF ± 5.0%         Temperature, type K thermocouple       -40 to 400°C DMM ± (1.0% + 1.5°C) (-40 to 752° F DMM ± (1.0% + 3°F))         Measuring rate       5 samples per second         Accuracy is given as ± (% of reading)         Meter data         Category rating       CAT IV—300 V, CAT III—600 V         IP rating       IP40         Drop test       3 m (9.8 ft.)         Warranty       https://www.flir.com/testwarranty         Calibration cycle       Once per year, recommended         Certifications         Certifications       C-UL-US, CE, RCM         Safety standards compliance       IEC 61010-1 CAT IV—600 V, CAT III—1000 V         Power system         Power requirements       3 × AA Energizer L91 lithium (Li/FeS₂) batteries or optional TAO4 lithium polymer rechargeable battery system	Frequency counter	50 kHz ± 0.03%
Diode test         3.000 V ± 0.9%           Capacitance         2.000 mF ± 2.0%, 10.00 mF ± 5.0%           Temperature, type K thermocouple         -40 to 400°C DMM ± (1.0% + 1.5°C) (-40 to 752° F DMM ± (1.0% + 3°F))           Measuring rate         5 samples per second           Accuracy is given as ± (% of reading)         CAT IV—300 V, CAT III—600 V           IP rating         IP40           Drop test         3 m (9.8 ft.)           Warranty         https://www.flir.com/testwarranty           Calibration cycle         Once per year, recommended           Certifications         C-UL-US, CE, RCM           Safety standards compliance         IEC 61010-1 CAT IV—600 V, CAT III—1000 V           Power system         Power requirements           Power requirements         3 × AA Energizer L91 lithium (Li/FeS₂) batteries or optional TA04 lithium polymer rechargeable battery system	Resistance	$6.000~{\rm M}\Omega \pm 0.9\%, 60.00~{\rm M}\Omega \pm 1.5\%$
Capacitance  2.000 mF ± 2.0%, 10.00 mF ± 5.0%  Temperature, type K thermocouple  -40 to 400°C DMM ± (1.0% + 1.5°C) (-40 to 752° F DMM ± (1.0% + 3°F))  Measuring rate  5 samples per second  Accuracy is given as ± (% of reading)  Meter data  Category rating  CAT IV—300 V, CAT III—600 V  IP rating  IP40  Drop test  3 m (9.8 ft.)  Warranty  Calibration cycle  Certifications  Certifications  Certifications  C-UL-US, CE, RCM  Safety standards compliance  IEC 61010-1 CAT IV—600 V, CAT III—1000 V  Power system  Power requirements  3 × AA Energizer L91 lithium (Li/FeS₂) batteries or optional TA04 lithium polymer rechargeable battery system	Continuity check threshold	30–480 Ω
Temperature, type K thermocouple  -40 to 400°C DMM ± (1.0% + 1.5°C) (-40 to 752° F DMM ± (1.0% + 3°F))  Measuring rate  5 samples per second  Accuracy is given as ± (% of reading)  Meter data  Category rating  CAT IV—300 V, CAT III—600 V  IP rating  IP40  Drop test  3 m (9.8 ft.)  Warranty  Calibration cycle  Once per year, recommended  Certifications  Certifications  Certifications  Certifications  CUL-US, CE, RCM  Safety standards compliance  IEC 61010-1 CAT IV—600 V, CAT III—1000 V  Power system  Power requirements  3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	Diode test	3.000 V ± 0.9%
F DMM ± (1.0% + 3°F))  Measuring rate 5 samples per second  Accuracy is given as ± (% of reading)  Meter data  Category rating CAT IV—300 V, CAT III—600 V  IP rating IP40  Drop test 3 m (9.8 ft.)  Warranty https://www.flir.com/testwarranty  Calibration cycle Once per year, recommended  Certifications  Certifications  Certifications  Certifications  Certifications  Safety standards compliance  Dower system  Power requirements  3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TAO4 lithium polymer rechargeable battery system	Capacitance	2.000 mF ± 2.0%, 10.00 mF ± 5.0%
Accuracy is given as ± (% of reading)  Meter data  Category rating  IP40  Drop test  3 m (9.8 ft.)  Warranty  Calibration cycle  Once per year, recommended  Certifications  Certifications  C-UL-US, CE, RCM  Safety standards compliance  IEC 61010-1 CAT IV—600 V, CAT III—1000 V  Power system  Power requirements  3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	Temperature, type K thermocouple	` , ,
Meter data       CAT IV—300 V, CAT III—600 V         IP rating       IP40         Drop test       3 m (9.8 ft.)         Warranty       https://www.flir.com/testwarranty         Calibration cycle       Once per year, recommended         Certifications       C-UL-US, CE, RCM         Safety standards compliance       IEC 61010-1 CAT IV—600 V, CAT III—1000 V         Power system       3 × AA Energizer L91 lithium (Li/FeS2) batteries or optional TA04 lithium polymer rechargeable battery system	Measuring rate	5 samples per second
Category rating  IP rating  IP 40  Drop test  3 m (9.8 ft.)  Warranty  https://www.flir.com/testwarranty  Calibration cycle  Once per year, recommended  Certifications  Certifications  C-UL-US, CE, RCM  Safety standards compliance  IEC 61010-1 CAT IV—600 V, CAT III—1000 V  Power system  Power requirements  3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	Accuracy is given as ± (% of reading)	
IP rating  Drop test  3 m (9.8 ft.)  Warranty  https://www.flir.com/testwarranty  Calibration cycle  Once per year, recommended  Certifications  Certifications  C-UL-US, CE, RCM  Safety standards compliance  IEC 61010-1 CAT IV—600 V, CAT III—1000 V  Power system  Power requirements  3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	Meter data	
Drop test 3 m (9.8 ft.)  Warranty https://www.flir.com/testwarranty  Calibration cycle Once per year, recommended  Certifications  Certifications  C-UL-US, CE, RCM  Safety standards compliance IEC 61010-1 CAT IV—600 V, CAT III—1000 V  Power system  Power requirements 3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	Category rating	CAT IV—300 V, CAT III—600 V
Warranty  Calibration cycle  Once per year, recommended  Certifications  Certifications  Certifications  C-UL-US, CE, RCM  Safety standards compliance  IEC 61010-1 CAT IV—600 V, CAT III—1000 V  Power system  Power requirements  3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	IP rating	IP40
Calibration cycle  Once per year, recommended  Certifications  Certifications  C-UL-US, CE, RCM  Safety standards compliance  IEC 61010-1 CAT IV—600 V, CAT III—1000 V  Power system  Power requirements  3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	Drop test	3 m (9.8 ft.)
Certifications Certifications C-UL-US, CE, RCM Safety standards compliance IEC 61010-1 CAT IV—600 V, CAT III—1000 V  Power system  Power requirements 3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	Warranty	https://www.flir.com/testwarranty
Certifications  C-UL-US, CE, RCM  Safety standards compliance  IEC 61010-1 CAT IV—600 V, CAT III—1000 V  Power system  Power requirements  3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	Calibration cycle	Once per year, recommended
Safety standards compliance  IEC 61010-1 CAT IV—600 V, CAT III—1000 V  Power system  3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	Certifications	
Power system  Power requirements 3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	Certifications	C-UL-US, CE, RCM
Power requirements  3 × AA Energizer L91 lithium (Li/FeS <sub>2</sub> ) batteries or optional TA04 lithium polymer rechargeable battery system	Safety standards compliance	IEC 61010-1 CAT IV—600 V, CAT III—1000 V
optional TA04 lithium polymer rechargeable battery system	Power system	
Battery life, Energizer L91 Llithium batteries Approximately 22 hours constant IGM	Power requirements	optional TA04 lithium polymer rechargeable
	Battery life, Energizer L91 Llithium batteries	Approximately 22 hours constant IGM



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Power system	T
Power system  Battery life, TA04 lithium polymer batteries	Approximately 22 hours constant IGM
Auto power off	5 minutes (default), 10 minutes, 20 minutes, and off selectable
	on selectable
Environmental data	10
Operating temperature	-10 to 50°C (14–122°F)
Operating Humidity	80% to 31°C; decreasing linearly to 50% at 31–50°C
Storage temperature and relative humidity (RH)	-20 to 60°C (-4 to 140°F), 0–80% RH (without batteries)
Temperature coefficient	Nominal 0.15 $\times$ (specified accuracy)/°C at -10°C to 18°C (14-64.4°F) or 28-50°C (82.4-122°F), or as otherwise specified
Operating altitude	2000 m (6560 ft.)
Pollution degree	2
EMC	EN61326-1
Meter physical data	
Weight	428.3 g (15.1 oz.)
Dimensions (L × W × H)	190 mm × 86.4 mm × 48.3 mm (7.5 in. × 3.4 in. × 1.9 in.)
Material	Polycarbonate/ABS
Color	Gray, black, and blue
Shipping information	
Packaging type	Color box with view of product in clamshell
Packaging contents	DM166, 3 × L91 lithium batteries (AA), high- quality silicone test leads, soft carrying case
Packaging weight	1.3 kg (2.9 lb.)
Packaging dimensions (H × W × L)	33 cm $\times$ 14 cm $\times$ 11 cm (12.6 in. $\times$ 5.5 in. $\times$ 4.3 in.)
Carton weight	16.5 kg (36.4 lb.)
Carton dimensions (H × W × L)	65 cm × 30 cm × 56 cm (25.6 in. × 11.8 in. × 22.0 in.)
Carton quantity	12
EAN-13	0793950391662
UPC-12	793950391662
Country of origin	Taiwan
Tariff code	9027504020
Tariff code  Technical support	9027504020
	9027504020 http://support.flir.com
Technical support	
Technical support Website	
Technical support Website Included in the box DM166 Thermal Imaging TRMS Multimeter with	

#### Supplies & accessories:

• TA04-KIT; Lithium Polymer Rechargeable Battery Kit



#### P/N: DM166

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- TA15; Universal Soft Sided Case
- TA16; Pouch for FLIR Multimeters
- TA50; Magnetic Hanging Strap for DM9x, IM7x Series
- TA60; Thermocouple probe with adapter
- 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