

FTK

Fixed Mount Infrared Temperature Calibration Checker



The FTK provides a quick and accurate way to check the calibration of infrared temperature sensors.

This rugged and portable unit is designed to provide fast calibration checks anywhere they are needed, from the factory to the workshop or laboratory.

Eighteen models are available; offering target temperatures from 35°C or 150°C, all providing outstanding stability with less than $\pm 0.2^\circ\text{C}$ deviation.

The FTK takes between 5 and 15 minutes to heat and stabilise at the desired temperature (depending on the model), and uses a clear LED to show when it has reached that temperature: green when the FTK is warming up, orange when the FTK is ready for operation and red when the FTK is above the calibration temperature.

The FTK can be used with any infrared temperature sensor that is able to measure between 35°C and 150°C and can focus on a target area less than $\varnothing 50.8$ mm.

SPECIFICATIONS

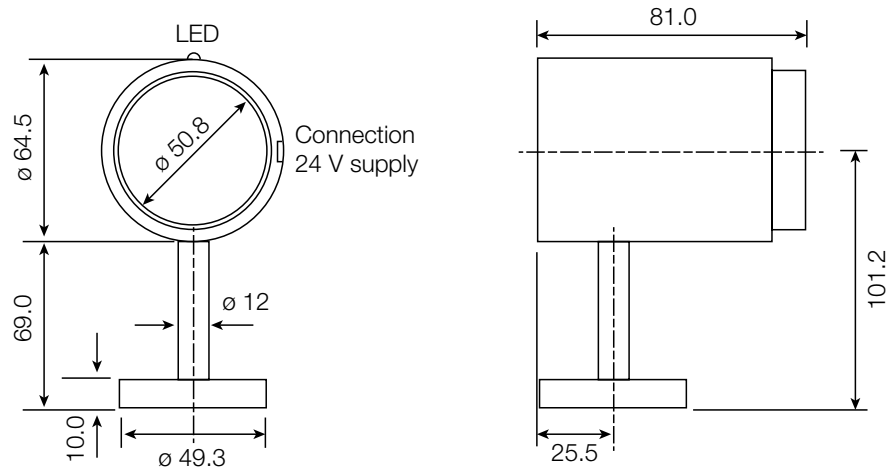
CALIBRATION SOURCE

Target Temperature:	from 35 °C to 150 °C depending on model (see table overleaf)
Emissivity (ϵ):	0.98 ± 0.004 (for wavelength of 2 to 5.4 μm and 8 to 14 μm)
Aperture diameter:	50.8 mm
Warm-up time:	max. 5 minutes (FTK 35) to 15 minutes (FTK 150)
Temperature uncertainty:	0.4 °C for $T_{\text{amb}} = 10$ to 30 °C (FTK 35 - 120) 0.6 °C for $T_{\text{amb}} = 0$ to 10 °C (FTK 35 - 120) 0.5 °C for $T_{\text{amb}} = 10$ to 40 °C (FTK 130 - 150) 0.7 °C for $T_{\text{amb}} = 0$ to 10 °C (FTK 130 - 150)
Repeatability:	0.2 °C
Stability:	0.1 °C
Temperature uniformity:	0.2 °C (central area $\varnothing 45$ mm)
Operating temperature: T_{amb} :	0 to 30 °C, temporary (2 minutes) up to 70 °C
Storage temperature:	0 to 70 °C
Relative humidity:	10 to 85 %, non condensing
Status LED:	green: warm-up orange: ready for operation red: above calibration temperature
Power supply:	24 V DC, max. 1 A
Protection class:	IP50 (EN 60529)
Weight:	0.9 kg
Dimensions [mm]:	64.5 x 81.0 x 133.5 (\varnothing x D x H)
CE marking:	according to EU regulations

POWER SUPPLY

Model	Description
Power supply:	100 to 240 V AC, 50 Hz
Output:	24 V DC, 1.3 A
Protection class:	EN 60950
Weight:	approx. 0.3 kg
CE marking:	according to EU directives regarding electromagnetic immunity

DIMENSIONS



All dimensions in mm

MODELS

Model	Description	Target Temperature
FTK 35	Calibration source FTK 35	35 °C
FTK 45	Calibration source FTK 45	45 °C
FTK 50	Calibration source FTK 50	50 °C
FTK 55	Calibration source FTK 55	55 °C
FTK 60	Calibration source FTK 60	60 °C
FTK 65	Calibration source FTK 65	65 °C
FTK 70	Calibration source FTK 70	70 °C
FTK 75	Calibration source FTK 75	75 °C
FTK 80	Calibration source FTK 80	80 °C
FTK 85	Calibration source FTK 85	85 °C
FTK 90	Calibration source FTK 90	90 °C
FTK 95	Calibration source FTK 95	95 °C
FTK 100	Calibration source FTK 100	100 °C
FTK 110	Calibration source FTK 110	110 °C
FTK 120	Calibration source FTK 120	120 °C
FTK 130	Calibration source FTK 130	130 °C
FTK 140	Calibration source FTK 140	140 °C
FTK 150	Calibration source FTK 150	150 °C

ACCESSORIES

Model	Description
FTKPSU	Power supply 100 to 240 V AC or 24 V DC
FTKPLUG-EU	Power plug EU
FTKPLUG-USA	Power plug US
FTKPLUG-UK	Power plug UK
FTKPLUG-AUS	Power plug AUS
FTKMOUNT	Adjustable ball and socket mounting block

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 Specifications subject to change without notice