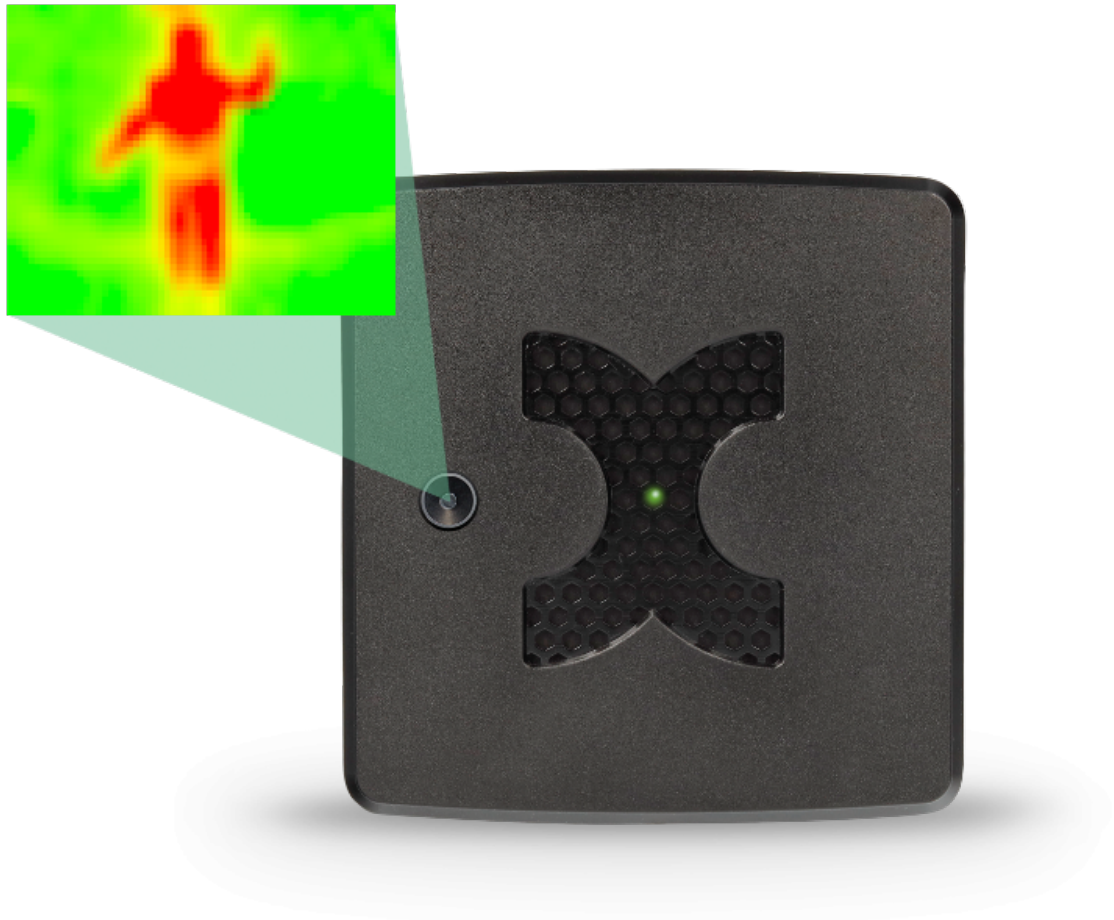


# MultiSensor-Thermal Image - Datasheet



## ORDER-CODES:

KMS-TI-90-B, KMS-TI-90-W, KMS-TI-90-B-BLE, KMS-TI-90-W-BLE, KMS-TI-40-B, KMS-TI-40-W, KMS-TI-40-B-BLE, KMS-TI-40-W-BLE

<b>Function</b>	MultiSensor for early fire detection and room/area monitoring
<b>Integrated software</b>	KentixONE via integrated web server (HTTPS)
<b>Sensor - air temperature</b>	Measuring range -40 to 85°C (accuracy $\pm 0.5^{\circ}\text{C}$ )
<b>Sensor - Relative humidity</b>	Measuring range 0 to 100% (accuracy $\pm 3\%$ )
<b>Sensor - dew point</b>	Calculated in $^{\circ}\text{C}$

<b>Sensor - surface temperature</b>	1024 pixel infrared array with germanium glass optics, measuring range -40 to 1,000°C, detection cone depending on type: 40° or 90°, range up to approx. 5m, measurement: temperature image (32×32), movement NETD (Noise Equivalent Temperature Difference): approx. 150mK/1Hz
<b>Sensor - Vibration</b>	3-axis accelerometer with position detection (sensitivity adjustable), measuring range 0.25-5G
<b>Sensor - Carbon monoxide (CO)</b>	0-1,000ppm measurement ± 10%, internal resolution: 20-1,000ppm (0-100%), service life 10 years
<b>Sensor - air quality (VOC, CO2)</b>	Measurement according to IAQ (Index for Air Quality), IAQ value 0-500 according to IAQ table*.
<b>Signal generator</b>	85dB, 2.3kHz
<b>External alarm inputs</b> (KENTIX system socket)	2x alarm input (e.g. armed-active, continuous-active alarm), wiring with potential-free contacts via separate KIO3 IO adapter
<b>External signal outputs</b> (KENTIX system socket)	2x signal output (e.g. armed-active alarm, continuous-active alarm), wiring via separate KIO3 IO adapter with relay outputs
<b>LED</b>	ALARM (red), RUN (green), LINK/ACT to LAN socket
<b>Ethernet with PoE</b>	10/100Mbit (default IP: 192.168.100.222) Power supply via PoE Class 2, power consumption approx. 3W
<b>Radio (BLE 2.4GHz)</b> (according to version)	2.4GHz ISM band (BLE), 128-bit encryption
<b>SD card</b>	Integrated Micro SD card holder as additional memory for image recording, up to 128 GB
<b>SNMP</b>	SNMP V2/3 (write/read), SNMP Traps (Simple Network Management Protocol)
<b>ReST API</b>	ReST API with JSON objects (HTTPS), webhooks
<b>Housing</b>	Material: PS 90 x 90 x 45 mm Weight approx. 100g Colors: White, Black
<b>Environmental conditions</b>	Temperature 0 – 50°C, humidity 5-95%, non-condensing
<b>Versions</b>	KMS-TI-40-B-BLE (Black housing, 40° optics) KMS-TI-40-W-BLE (White housing, 40° optics) KMS-TI-90-B-BLE (Black housing, 90° optics) KMS-TI-90-W-BLE (White housing, 90° optics) KMS-TI-40-B (black housing, 40° optics) KMS-TI-40-W (white housing, 40° optics) KMS-TI-90-B (black housing, 90° optics) KMS-TI-90-W (white housing, 90° optics)

<b>Scope of delivery</b>	Mounting bracket, mounting material, SlimLine cable 3m
<b>Accessories</b>	PoE injector (KPOE150S) IO adapter (KIO3) Leakage sensor (KLS03)
<b>Certification</b>	CE

## Thermal image sensor field of view

### 40° optics (ART: KMS-TI-40-x-x)

Measuring distance	Area	Measuring grid
1m	73 x 73cm (0,53sqm)	2,27 x 2,27cm
2m	145 x 145cm (2,12sqm)	4,55 x 4,55cm
3m	218 x 218cm (4,55sqm)	6,82 x 6,82cm
4m	291 x 291cm (9,10sqm)	9,10 x 9,10cm

### 90° optics (ART: KMS-TI-90-x-x)

Measuring distance	Area	Measuring grid
1m	200 x 200cm (4,00sqm)	6,25 x 6,25cm
2m	400 x 400cm (16,00sqm)	12,50 x 12,50cm
3m	600 x 600cm (36,00sqm)	18,75 x 18,75cm
4m	800 x 800cm (64,00sqm)	25,00 x 25,00cm

## Measurement of air quality according to IAQ Index\*

Air index	Air quality	Effects (long-term exposure)	Proposed measure
<b>0 - 50</b>	Excellent	Clean air; the best for the well-being	No measures required
<b>51 - 100</b>	Good	No irritation or effects on well-being	No measures required
<b>101 - 150</b>	Lightly soiled	Reduction of the well-being possible	Ventilation proposed

<b>151 - 200</b>	Moderately dirty	Clearer irritation possible	Increase ventilation with clean air
<b>201 - 250</b>	Heavily soiled	Depending on the type of VOCs, exposure can lead to effects such as headaches	Improve ventilation
<b>251 - 350</b>	Heavily soiled	More serious health problems possible if harmful VOCs are present	Contamination should be identified when level is reached even without people present; maximize ventilation & reduce presence
<b>&gt; 351</b>	Extremely dirty	Headache, additional neurotoxic effects possible	Contaminants must be identified; avoid presence in the room and maximize ventilation