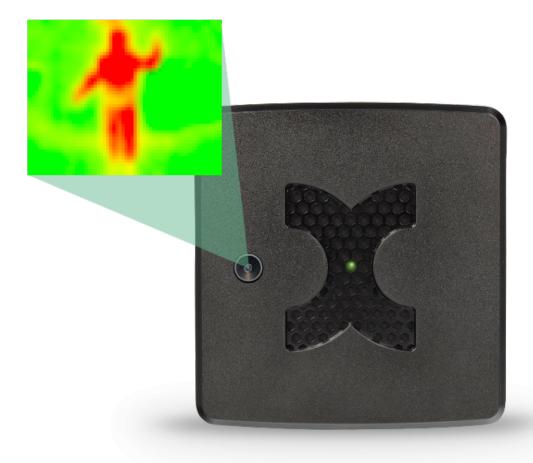


MultiSensor Thermal Image - DATASHEET



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

Function	MultiSensor for room/area monitoring and early fire detection	
Integrated software	KentixONE via integrated web server (HTTPS)	
Sensor - temperature	Measuring range -40 to 85°C (accuracy \pm 0.5°C)	
Sensor - Relative humidity	Measuring range 0 to 100% (accuracy $\pm 3\%$)	
Sensor - dew point	Calculated in °C	
Sensor - IR Thermal Array	1024 pixel infrared array, measuring range -40 to 1,000°C, detection cone depending on type: 40° or 90°, range up to approx. 5m, Measurement: temperature image, movement/direction of movement, object detection	



Sensor - Vibration3-axis accelerometer with position detection (sensitivity adjustable), measuring range 0.25-5GSensor - Carbon monoxide0-1,000ppm measurement ± 10%Internal resolution: 20-1,000ppm (0-100%), lifetime 10 yearsSensor - Air Quality (VOC)Measurement according to IAQ (Index for Air Quality), IAQ value 0-500 according to IAQ table*.Sensor - air pressureMeasuring range 300 - 1,100hPa, altitudeSensor - External alarm inputs2 x alarm input (e.g. armed-active, continuous-active alarming)Wiring with potential-free contacts via separate KIO3 power adapterSignal generator85dB, 2.3kHzExternal message outputs2 x signal output (e.g. armed-active alarm, continuous-active alarm) Wiring via separate KIO3 power adapter with relay outputsIEDALARM (red), RUN (green), LINK/ACT to LAN socketBethernet with PoE10/100Mbit (Default IP: 192.168.100.222) Power supply via PoE Class 2, power consumption approx. 2W mage recording, up to 128 GBSNMPSNMP V2/3 (write/read), SNMP Traps (Simple Network Management Protocol)ReST APIReST API with JSON objects (HTTPS), webhooks with free data structureKENTIX system socketRJ45 jack for connecting external expansion modulesHousingColors: White, BlackEnvironmental conditionsSmerature 0 - 50°C ; Ideally 18 - 24 °C Humidity 5-95%, non- condensing.KMS-T1-40-B (Black housing, 40° optics)KMS-T1-40-B (White housing, 40° optics)	Sensor - Carbon monoxide CO) Sensor - Air Quality (VOC) Sensor - air pressure Sensor - External alarm inputs Signal generator	 adjustable), measuring range 0.25-5G 0-1,000ppm measurement ± 10%Internal resolution: 20-1,000ppm (0-100%), lifetime 10 years Measurement according to IAQ (Index for Air Quality), IAQ value 0-500 according to IAQ table*. Measuring range 300 - 1,100hPa, altitude 2 x alarm input (e.g. armed-active, continuous-active alarming)Wiring with potential-free contacts via separate KIO3 power adapter 85dB, 2.3kHz 2x signal output (e.g. armed-active alarm, continuous-active alarm)
(CO)20-1,000ppm (0-100%), lifetime 10 yearsSensor - Air Quality (VOC)Measurement according to IAQ (Index for Air Quality), IAQ value 0-500 according to IAQ table*.Sensor - air pressureMeasuring range 300 - 1,100hPa, altitudeSensor - External alarm inputs2 x alarm input (e.g. armed-active, continuous-active alarming)Wiring with potential-free contacts via separate KIO3 power adapterSignal generator85dB, 2.3kHzExternal message outputs2x signal output (e.g. armed-active alarm, continuous-active alarm) Wiring via separate KIO3 power adapter with relay outputsLEDALARM (red), RUN (green), LINK/ACT to LAN socketBethernet with PoE10/100Mbit (Default IP: 192.168.100.222) Power supply via PoE Class 2, power consumption approx. 2W Power supply via PoE Class 2, power consumption approx. 2WSNMPSNMP V2/3 (write/read), SNMP Traps (Simple Network Management Protocol)ReST APIReST API with JSON objects (HTTPS), webhooks with free data structureHousingMaterial: PS 90 x 90 x 45 mm Weight approx. 100g Colors: White, BlackEnvironmental conditionsTemperature 0 - 50°C ; Ideally 18 - 24 °C Humidity 5-95%, non- condensing	<pre>(CO) Sensor - Air Quality (VOC) Sensor - air pressure Sensor - External alarm inputs Signal generator</pre>	 20-1,000ppm (0-100%), lifetime 10 years Measurement according to IAQ (Index for Air Quality), IAQ value 0-500 according to IAQ table*. Measuring range 300 - 1,100hPa, altitude 2 x alarm input (e.g. armed-active, continuous-active alarming)Wiring with potential-free contacts via separate KIO3 power adapter 85dB, 2.3kHz 2x signal output (e.g. armed-active alarm, continuous-active alarm)
Sensor - Air Quanty (VOC)value 0-500 according to IAQ table*.Sensor - air pressureMeasuring range 300 - 1,100hPa, altitudeSensor - External alarm inputs2 x alarm input (e.g. armed-active, continuous-active alarming)Wiring with potential-free contacts via separate KIO3 power adapterSignal generator85dB, 2.3kHzExternal message outputs2x signal output (e.g. armed-active alarm, continuous-active alarm) Wiring via separate KIO3 power adapter with relay outputsLEDALARM (red), RUN (green), LINK/ACT to LAN socketEthernet with PoE10/100Mbit (Default IP: 192.168.100.222) Power supply via PoE Class 2, power consumption approx. 2WSD cardIntegrated Micro SD card holder as additional memory for image recording, up to 128 GBSNMPSNMP V2/3 (write/read), SNMP Traps (Simple Network Management Protocol)ReST APIReST API with JSON objects (HTTPS), webhooks with free data structureHousingMaterial: PS 90 x 90 x 45 mm Weight approx. 100g Colors: White, BlackEnvironmental conditionsTemperature 0 - 50°C ; Ideally 18 - 24 °C Humidity 5-95%, non- condensing	Sensor - air pressure Sensor - External alarm inputs Signal generator	 value 0-500 according to IAQ table*. Measuring range 300 - 1,100hPa, altitude 2 x alarm input (e.g. armed-active, continuous-active alarming)Wiring with potential-free contacts via separate KIO3 power adapter 85dB, 2.3kHz 2x signal output (e.g. armed-active alarm, continuous-active alarm)
Sensor - External alarm2 x alarm input (e.g. armed-active, continuous-active alarming)Wiring with potential-free contacts via separate KIO3 power adapterSignal generator85dB, 2.3kHzExternal message outputs2x signal output (e.g. armed-active alarm, continuous-active alarm) Wiring via separate KIO3 power adapter with relay outputsLEDALARM (red), RUN (green), LINK/ACT to LAN socketEthernet with PoE10/100Mbit (Default IP: 192.168.100.222) Power supply via PoE Class 2, power consumption approx. 2WSD cardIntegrated Micro SD card holder as additional memory for image recording, up to 128 GBSNMPSNMP V2/3 (write/read), SNMP Traps (Simple Network Management Protocol)ReST APIReST API with JSON objects (HTTPS), webhooks with free data structureHousingMaterial: PS 90 x 90 x 45 mm Weight approx. 100g colors: White, BlackEnvironmental conditionsCemperature 0 - 50°C ; Ideally 18 - 24 °C Humidity 5-95%, non- 	Sensor - External alarm inputs Signal generator	 2 x alarm input (e.g. armed-active, continuous-active alarming)Wiring with potential-free contacts via separate KIO3 power adapter 85dB, 2.3kHz 2x signal output (e.g. armed-active alarm, continuous-active alarm)
Sensor - External alarmalarming)Wiring with potential-free contacts via separate KIO3 power adapterSignal generator85dB, 2.3kHzExternal message outputs2x signal output (e.g. armed-active alarm, continuous-active alarm) Wiring via separate KIO3 power adapter with relay outputsLEDALARM (red), RUN (green), LINK/ACT to LAN socketEthernet with PoE10/100Mbit (Default IP: 192.168.100.222) Power supply via PoE Class 2, power consumption approx. 2WSD cardIntegrated Micro SD card holder as additional memory for image recording, up to 128 GBSNMPSNMP V2/3 (write/read), SNMP Traps (Simple Network Management Protocol)ReST APIReST API with JSON objects (HTTPS), webhooks with free data 	inputs Signal generator	 alarming)Wiring with potential-free contacts via separate KIO3 power adapter 85dB, 2.3kHz 2x signal output (e.g. armed-active alarm, continuous-active alarm)
External message outputs2x signal output (e.g. armed-active alarm, continuous-active alarm) Wiring via separate KIO3 power adapter with relay outputsLEDALARM (red), RUN (green), LINK/ACT to LAN socketEthernet with PoE10/100Mbit (Default IP: 192.168.100.222) Power supply via PoE Class 2, power consumption approx. 2WSD cardIntegrated Micro SD card holder as additional memory for 		2x signal output (e.g. armed-active alarm, continuous-active alarm)
External message outputsalarm) Wiring via separate KIO3 power adapter with relay outputsLEDALARM (red), RUN (green), LINK/ACT to LAN socketEthernet with PoE10/100Mbit (Default IP: 192.168.100.222) Power supply via PoE Class 2, power consumption approx. 2WSD cardIntegrated Micro SD card holder as additional memory for image recording, up to 128 GBSNMPSNMP V2/3 (write/read), SNMP Traps (Simple Network Management Protocol)ReST APIReST API with JSON objects (HTTPS), webhooks with free data structureHousingMaterial: PS 90 x 90 x 45 mm Weight approx. 100g Colors: White, BlackEnvironmental conditionsTemperature 0 - 50°C ; Ideally 18 - 24 °C Humidity 5-95%, non- condensing	External message outputs	alarm)
Ethernet with PoE10/100Mbit (Default IP: 192.168.100.222) Power supply via PoE Class 2, power consumption approx. 2WSD cardIntegrated Micro SD card holder as additional memory for image recording, up to 128 GBSNMPSNMP V2/3 (write/read), SNMP Traps (Simple Network Management Protocol)ReST APIReST API with JSON objects (HTTPS), webhooks with free data structureKENTIX system socketRJ45 jack for connecting external expansion modulesHousingMaterial: PS 90 x 90 x 45 mm Weight approx. 100g Colors: White, BlackEnvironmental conditionsTemperature 0 - 50°C ; Ideally 18 - 24 °C Humidity 5-95%, non- condensingKMS-TI-40-B (Black housing, 40° optics) KMS-TI-40-W (White housing 40° optics)		Wiring via separate KIO3 power adapter with relay outputs
Ethernet with PoePower supply via PoE Class 2, power consumption approx. 2WSD cardIntegrated Micro SD card holder as additional memory for image recording, up to 128 GBSNMPSNMP V2/3 (write/read), SNMP Traps (Simple Network Management Protocol)ReST APIReST API with JSON objects (HTTPS), webhooks with free data structureKENTIX system socketRJ45 jack for connecting external expansion modulesHousingMaterial: PS 90 x 90 x 45 mm Weight approx. 100g Colors: White, BlackEnvironmental conditionsTemperature 0 - 50°C ; Ideally 18 - 24 °C Humidity 5-95%, non- condensing	LED	ALARM (red), RUN (green), LINK/ACT to LAN socket
SD cardimage recording, up to 128 GBimage recording, up to 128 GBSNMPSNMP V2/3 (write/read), SNMP Traps (Simple Network Management Protocol)ReST APIReST API with JSON objects (HTTPS), webhooks with free data structureKENTIX system socketRJ45 jack for connecting external expansion modulesHousingMaterial: PS 90 x 90 x 45 mm Weight approx. 100g Colors: White, BlackEnvironmental conditionsTemperature 0 - 50°C ; Ideally 18 - 24 °C Humidity 5-95%, non- condensingKMS-TI-40-B (Black housing, 40° optics) KMS-TI-40-W (White housing 40° optics)	Ethernet with PoE	
SNMPManagement Protocol)MeST APIReST API with JSON objects (HTTPS), webhooks with free data structureKENTIX system socketRJ45 jack for connecting external expansion modulesHousingMaterial: PS 90 x 90 x 45 mm Weight approx. 100g Colors: White, BlackEnvironmental conditionsTemperature 0 - 50°C ; Ideally 18 - 24 °C Humidity 5-95%, non- condensingKMS-TI-40-B (Black housing, 40° optics) KMS-TI-40-W (White housing 40° optics)	SD card	
KeST APTstructurestructurestructureKENTIX system socketRJ45 jack for connecting external expansion modulesHousingMaterial: PS 90 x 90 x 45 mm Weight approx. 100g Colors: White, BlackEnvironmental conditionsTemperature 0 - 50°C ; Ideally 18 - 24 °C Humidity 5-95%, non- condensingKMS-TI-40-B (Black housing, 40° optics) KMS-TI-40-W (White housing 40° optics)	SNMP	
Housing Material: PS 90 x 90 x 45 mm Weight approx. 100g Environmental conditions Temperature 0 - 50°C ; Ideally 18 - 24 °C Humidity 5-95%, non-condensing KMS-TI-40-B (Black housing, 40° optics) KMS-TI-40-W (White housing, 40° optics)	ReST API	
Housing Colors: White, Black Environmental conditions Temperature 0 - 50°C ; Ideally 18 - 24 °C Humidity 5-95%, non- condensing KMS-TI-40-B (Black housing, 40° optics) KMS-TI-40-W (White housing, 40° optics)	KENTIX system socket	RJ45 jack for connecting external expansion modules
Environmental conditions condensing KMS-TI-40-B (Black housing, 40° optics) KMS-TI-40-W (White housing, 40° optics)	Housing	
KMS-TI-40-W (White housing 40° ontics)	Environmental conditions	
TypesKMS-TI-90-B (Black housing, 90° optics)KMS-TI-90-W (White housing, 90° optics)	Types	KMS-TI-40-W (White housing, 40° optics) KMS-TI-90-B (Black housing, 90° optics)
Scope of delivery Mounting bracket, mounting material, SlimLine cable 3m	Scope of delivery	Mounting bracket, mounting material, SlimLine cable 3m
Accessories PoE Injector (KPOE150S) Power adapter with power supply (KIO3) Leakage sensor (KI S03)	Accessories	
	Exams	CE



Thermal image sensor field of view

40° optics (ART: KMS-TI-40-B/W)

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-B/W)

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
0 - 50	Excellent	Clean air; the best for the well-being	No measures required
51 - 100	Good	No irritation or effects on well-being	No measures required
101 - 150	Lightly soiled	Reduction of the well-being possible	Ventilation proposed
151 - 200	Moderately dirty	Clearer irritation possible	Increase ventilation with clean air
201 - 250	Heavily soiled	Depending on the type of VOCs, exposure can lead to effects such as headaches	Improve ventilation



251 - 350	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
> 351	Extremely dirty	Headache, additional neurotoxic effects possible	Contaminants must be identified; avoid presence in the room and maximize ventilation