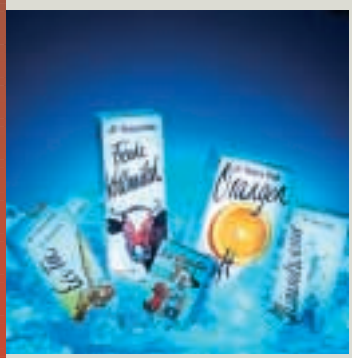
- Chopped radiation method for drift-free measurements
- Fast response times down to 5 msec
- HD-version up to 180 °C ambient temperature
- Laser pointer to mark target center

WE GIVE YOU A HANDLE ON YOUR TEMPERATURES

Accurate and fast responding: measurements in plastic industry



Ice chilled beverages are monitored in their containers

Temperature measurements during paper production and processing

INFRARED RADIATION PYROMETER

KTX

The rugged workhorse – accurate, quick, and application oriented

HEITRONICS
Infrarot Messtechnik

HEITRONICS – PRECISE INFRARED MEASURING TECHNOLOGY FOR DEMANDING SPECIALISTS

KTX-series
The Rugged Workhorse

Primary deployment:
In all industrial processes

Versatile:
Radiation pyrometers of the KTX-series are available in a variety of models. Optional features include built-in laser pointer or temperature indicator. The integrated laser beam is used for optimal alignment and checking the target area.

Enhanced
temperature resolution - by a factor 5 - is provided in the i-version. Preferred deployment is in lower temperature ranges to maintain high temperature resolution.

Accurate
measuring of temperatures from 0 °C to 2000 °C with 0.3 K temperature resolution

Patent:
The unique HEITRONICS chopped radiation method is protected by patents. This feature completely eliminates thermal drift and compensates thermal shock. The resulting stability, combined with effective electronic noise reduction circuits, is the key for the excellent temperature resolution, which allows the measurement of very small targets in short time intervals.

Fast:
Selectable response times starting at 50 msec and selectable linearized analog outputs are standard features for each model of the KTX-series The version V even provides a response time as fast as 5 msec.

Clear sight:
A lens purger is available as an optional feature. It is preferably deployed in hostile environments, in which dust, oil, or vaporized aerosols may contaminate the lens surface.

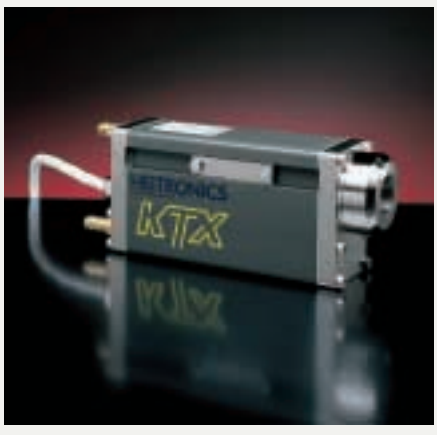
Temperature immunity
against ambients up to 180 °C is provided by the protective housing of the HD-version. In addition, it protects the instrument against abusive substances in dirty and hostile environments and still facilitates accurate non-contact temperature measurements down to 0 °C

KTX-series

The Exceptional Performer
Radiation pyrometers of the KTX-series are housed in rugged, all-metal enclosures and are suited for unrestricted industrial use. By the choice of interchangeable lenses, target sizes as small as 2 mm can by fully viewed.

KTX-series
versatile

An available option for all KTX-models is the integrated laser pointer. The housing of the HD-version is water coolable. Connections for water hoses are provided (see picture on the right). Advantage: The permissible maximum ambient temperature for the operation of the radiation pyrometer is extended to 180 °C.



A Multitude of Applications

Applications cover the entire range of industrial processes, such as production and processing of plastics, glass, metals, drying and coating of paper or textiles, thermal forming and curing processes on a variety of materials.
In short: Potential applications are nearly unlimited.

◀ *Thermal monitoring during Styrofoam production*

▶ *Temperature control of coating process*

■ KTX-series Temperature Indicator

A temperature indicator can be fitted onto the rear end of the instrument housing. The measured temperature value is displayed. The measuring range extends from 0 °C to 2,000 °C.
The special feature: All available options, from the air purger for lens cleaning to the water coolable housing, can be combined with each other.

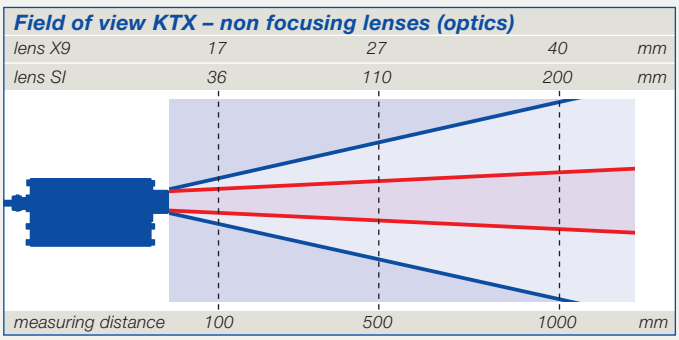
■ Accessories

Intelligent Temperature Meter

◀ Intelligent temperature meter MS 30 for panel mounting

◀ Intelligent temperature meter MS 35 - desk top model

◀ *A choice among different focusing lenses allows adjustment of the target size to the prevailing working distance*



◀ *For „non-focusing lenses“ the target size increases proportional to the working distance*

■ Additional Accessories

Blackbody radiation sources and many other helpful tools

◀ Blackbody radiation sources SW10 and SW11 for calibration and calibration checks between 50 °C and 1,000 °C

◀ Portable blackbody radiation source SW15 for calibration and calibration checks at 100 °C

Infrared Radiation Pyrometer KTX-Series

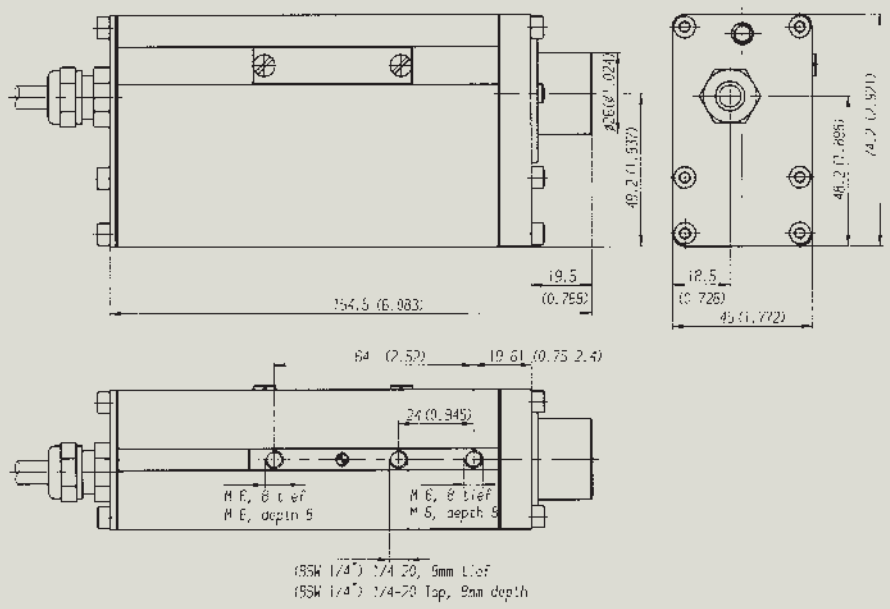
General Specifications

Temperature ranges	0 °C ... 2000 °C (see table below), special ranges on request
Temperature resolution (NETD)	Depends on measured temperature and response time, typical value ± 0.3 K
Accuracy	±1°C ± 0.8% of the difference between target and instrument temperature
*as a function of housing temperature	±0,04%/ °C of the housing temperature other than 25 °C
Spectral responses	see table below
Field of view	Diameter depends on lens and unit type, see table below
Aiming on target	Several optical and mechanical alignment tools, option: laser pointer
Emissivity setting	Adjustable from 0.5 ... 1.0 by potentiometer
Response time	50 msec ... 1.5 sec programmable. Version V: 5 msec
Analog output	0 ... 20 mA or 4 ... 20 mA linear, programmable
Operating voltages	24 VDC ± 10% current consumption; 80 mA
Permissible ambient temperature	0°C ... 60 °C, HD-Version up to 180 °C
Storage temperature	-20 °C ... +85 °C
Type of protection / Weight	NEMA4 (equivalent IP65 - DIN 4005) / approx. 0.75 kg
Housing	Metal

*) Please ask for our additional literature regarding temperature ranges, temperature resolution, field of view

Unit type	Spectral range / µm	Temperature range / ˚C	Lens type	Field of view / mm @ mm distance		Application
KTX.DD	2-2.7	500… 2000	K7/K10	40 at	1000	Metals, metal oxides, ceramics, glass volume
			L7/L10	4 at	65	
			M7/M10	2 at	17	
			N7/N10	6 at	130	
KTX.TQI	3.43	50… 300	L7/L10	8 at	70	Thin film plastics, e.g.: PE, PVC
			N7/N10	90 at	1000	
KTX.TN	3.9	200… 1000	K7/K10	40 at	1000	Measurements through hot gases and flame, glass volume, ceramics
			L7/L10	4 at	70	
			M7/M10	2 at	20	
			N7/N10	6 at	130	
KTX.CD	5.2	200… 1400	K7/K10	50 at	1000	All kind of glass, quartz
			L7/L10	4 at	70	
			M7/M10	2 at	20	
			N7/N10	7 at	150	
KTX.SN	7.9	0… 500	K7/K10	70 at	1000	Thin film plastics, e.g.: PET, PA, fluor carbon
			L7/L10	5 at	95	
			M7/M10	2 at	25	
			N7/N10	10 at	200	
KTX	7-15	0… 250	X9	40 at	1000	Asphalt, building materials, wood, electronic components, liquids, paper, textiles, rubber, enamel or coated surfaces, varnish, thicker plastics (>1 mm), food
		0… 500	L6/L9	5 at	95	
			M6/M9	2 at	20	
			N6/N9	6 at	140	
			Si	FOV 1:4,5		

Housing dimensions in mm (inch)



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