

# DKHIRT Handheld Infrared Thermometer Datasheet

## DKHIRT Highlights

DKHIRT handheld infrared thermometer is designed to meet process performance requirements in many industrial applications, including highly demanding hot environments in primary and secondary metal processings, as well as petrochemical and power plant operations.

The strong and rugged design of this new generation portable thermometer withstands a 1m (2.2ft) drop test and provides longer operational cycle for up to 12 hours when powered with rechargeable battery.

DKHIRT handheld thermometer features intuitive user interface for easy parameter set-up and enables instant display of data analysis and trending, as well as fast and easy data transfer to computer via USB port.

To meet the highly demanding requirements of hot industrial environments, the DKHIRT infrared thermometer features high optical resolution 320:1, which ensures accurate temperature readings at longer distances. Center laser and scope sighting, visible even against "red hot" backgrounds, make this thermometer a perfect choice for high temperature applications.

## Measurement Specifications:

### Temperature Ranges:

DKHIRT L1	-25-500℃
DKHIRT L2	-25-1250℃
DKHIRT L3	100-800℃
DKHIRT H1	400-1800℃
DKHIRT H2	800-3000℃

### Detector

DKHIRT L1, DKHIRT L2	Thermopile 8-14μm
DKHIRT L3	InGaAs 2-3.1μm
DKHIRT H1	InGaAs 0.7-1.7μm
DKHIRT H2	Si 0.4-1.1μm

### Accuracy

DKHIRT L1, DKHIRT L2	±1%(FS)
DKHIRT L3	±0.5%(FS)
DKHIRT H1, DKHIRT H2	±0.5%(FS)

Repeatability ±0.2%

Temperature Resolution 1℃

### Response Time

DKHIRT L1, DKHIRT L2	≤50ms
DKHIRT L3	≤5ms
DKHIRT H1, DKHIRT H2	≤5ms

Emissivity 0.10 to 1.00 (0.01)



## Optical Specifications:

### Typical Spot Size at Minimum Focus Distance

Models	D:S	Minimum Spot Size
DKHIRT L1	30:1	10mm@300mm
DKHIRT L2	70:1	5.7mm@400mm
DKHIRT L3	200:1	3mm@600mm
DKHIRT H1	320:1	1.87mm@600mm
DKHIRT H2	320:1	1.87mm@600mm

## Electrical Specifications:

### Outputs

Analog	NO
Digital	USB

### Adjustable

Emissivity setting  
Laser control  
Working mode  
Response time  
℃/F  
Communication

Power Supply 7.4VDC 2200mA Li battery

## General Specifications:

Environment Rating	IP65
Ambient Temperature	0 to 65℃
Storage Temperature	-20-70℃
Relative Humidity	10-95%, non-condensing
Anti Disturbance	JB/T9233.11-1999
Thermal Shock	GB/T2423.1, GB/T2423.2
Dimension	L:227mm, W: 61mm, H:61
Weight	600g

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## Optical Resolution

