



## KIR SERIES KIR3 INFRA-RED TEMPERATURE SENSOR

The KIR3 Series of Infra-Red Temperature Sensors are designed to withstand the harsh environments of motorsport and automotive testing applications.

By using a proven Infra-Red technology, the KIR3 offers high performance and reliability at even under extreme temperature and vibration.

Offering a compact, robust and reliable solution for non-contact measurements on motorsport applications such as: tyres, carbon, steel brakes and engine temperatures.

Fully user programmable, the temperature range and the emissivity gain can be set to optimise the output for a wide range of applications.

Simple user friendly configuration software allows optimum setup of the sensor for each application — or KA Sensors can supply the sensor already setup ready to use.

## TECHNICAL SPECIFICATIONS

<b>Temperature Ranges</b>	-20°C to +1000°C
<b>Accuracy</b>	<±1.5°C FS
<b>Emissivity Gain</b>	0.10 to 1.10 (Adjustable)
<b>Spectral Range</b>	8-14µm
<b>Optical Range</b>	10:1 (10mm Spot at 100mm)
<b>Output</b>	0V-5V (Adjustable)
<b>Supply</b>	5-28Vdc
<b>Operating Temperature Range</b>	Sensing Head: -20°C to +125°C Electronics Housing: -20°C to +75°C
<b>Repeatability</b>	±0.75°C
<b>Response Time</b>	30ms to 2 Seconds (95% Signal/Adjustable Via Software)
<b>Protection Class</b>	IP65
<b>Construction</b>	Carbon Tube for Electronics, Stainless Steel
<b>Electrical Connection</b>	50cm from Sensor to Electronics, 100cm from Electronics to Flying Leads, 55Spec, 26 AWG Cable + DR25 Sleeve
<b>Weight</b>	70g (Including Sensor, Cable and Electronics)
<b>Options</b>	Cable Assembly, Connection and Labelling

KA Sensors adopts a continuous development program which sometimes necessitates specification changes without notice.

## Sensors For Motorsport

### Features

- -20 to 1000°C Range
- Fully Programmable
- Miniature Size
- 10:1 Optics
- IP65 Sealed
- 0 to 5V Output

### Applications

- Tyre Temperature
- Brake Temperature
- Engine & Exhaust Temperatures

kasensors.com

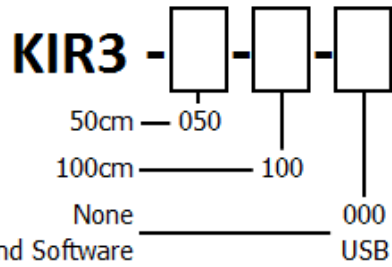
sales@kasensors.com

+44(0)1476 568057

KIR3 10.18

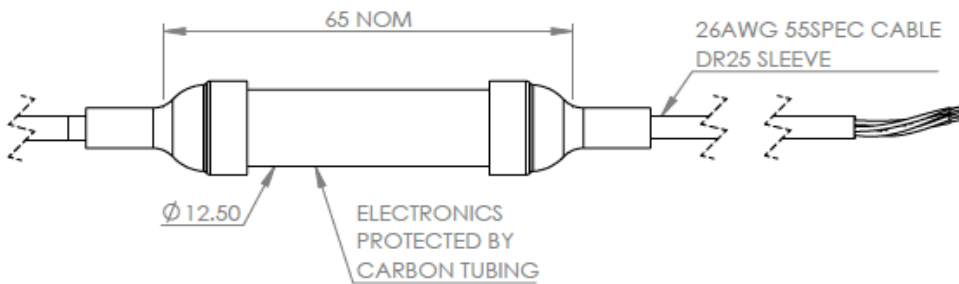
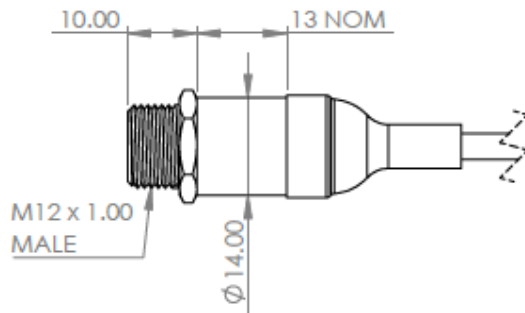
# PART NUMBER CONFIGURATOR

**Sensor to Electronics**  
**Electronics to Flying Leads**  
**Special Codes**



The KA configuration tool is used to specify a standard KA Sensor, other options are available.

## MECHANICAL DETAILS



## CONNECTION DETAILS

	<b>+Ve Supply</b>	<b>0V Supply</b>	<b>Output</b>	<b>Comms</b>
Sensor	Red	Black	White	Green
USB Cable	White	Brown	Yellow	Green

*Sense*  
*Analyse*  
*Control*

### Services for:

- Data Logging
- Telemetry
- Controls
- Wiring

### Contact us

KA Sensors Ltd  
 Unit 14 & 15  
 The Old Malthouse  
 Springfield Road  
 Grantham  
 Lincolnshire  
 United Kingdom  
 NG31 7BG

kasensors.com  
 sales@kasensors.com  
 +44(0)1476 568057

KIR3 10.18