

# Brake Temperature Sensors (RLACS314)

**VBOX**  
MOTORSPORT

The RLACS314 Brake Temperature Sensors have been specifically designed to measure surface temperature of a brake disc, providing invaluable information.

Each sensor can measure up to 16 temperature points on an object with surface temperatures ranging from -20 to 950° C.

This information can be displayed as part of the graphical overlay when selecting the dedicated screen scene for a VBOX Video HD2.



## Features

- Log brake temperatures throughout duration of test
- Up to 16 temperature points per sensor
- 60° field of view
- Pre-configured brake temperature VBOX Video HD2 scene to get you up and running
- CAN Bus data output

## Package Contents

Description	Product Code
4x 60° Field of View Brake Temperature Sensors	ACS314-BFL/BFR/BRL/BRR
1x Wiring Loom	ACS272LOOM

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## Sensor Specification

Temperature Measurement Range	-20 to 950° C
Accuracy	±2.0% FS for -20° C < Tp < 85° C
Field of View, FOV	60° x 8°
Number of Channels	16
Thermal Time Constant	2 ms
Effective Emissivity	0.01 – 1.00 (default = 0.55)
Spectral Range	8 to 14 µm

## Electrical Specification

Recommended Supply Voltage	5 to 8 V
Supply Current	30 mA

Features Reverse polarity protection and over-temperature protection (125° C)

## Wiring

Supply Voltage	Red
Ground	Black
CAN +	Blue
CAN -	White

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## Mechanical Specification

Weight	20 g
Protection Rating	IP 66

## CAN Specification

Standard	CAN2.0A (11 bit identifier) ISO-11898	<b>Base CAN ID's</b>	
Bit Rate	1 Mbit/s	Front Left Sensor	0x4C4
Byte Order	Big-Endian / Motorola	Front Right Sensor	0x4C9
Scale	0.1°C / bit	Rear Left Sensor	0x4CE
Offset	-100°C	Rear Right Sensor	0x4D3

### CAN ID: Base ID

Channel 1		Channel 2		Channel 3		Channel 4	
Byte 0 (MSB)	Byte 1 (LSB)	Byte 2 (MSB)	Byte 3 (LSB)	Byte 4 (MSB)	Byte 5 (LSB)	Byte 6 (MSB)	Byte 7 (LSB)

### CAN ID: Base ID+1

Channel 5		Channel 6		Channel 7		Channel 8	
Byte 0 (MSB)	Byte 1 (LSB)	Byte 2 (MSB)	Byte 3 (LSB)	Byte 4 (MSB)	Byte 5 (LSB)	Byte 6 (MSB)	Byte 7 (LSB)

### CAN ID: Base ID+2

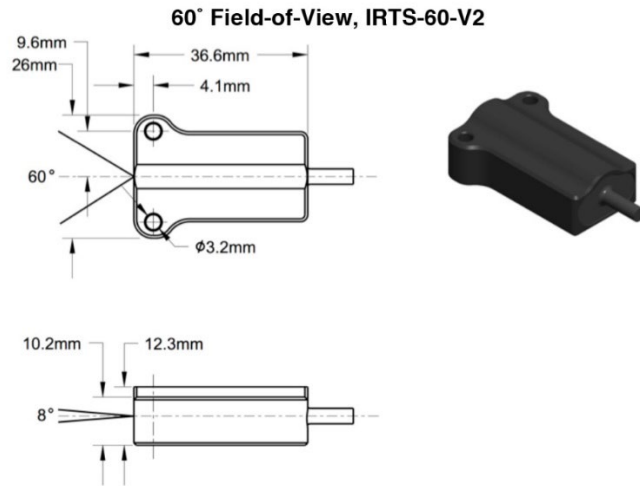
Channel 9		Channel 10		Channel 11		Channel 12	
Byte 0 (MSB)	Byte 1 (LSB)	Byte 2 (MSB)	Byte 3 (LSB)	Byte 4 (MSB)	Byte 5 (LSB)	Byte 6 (MSB)	Byte 7 (LSB)

### CAN ID: Base ID+3

Channel 13		Channel 14		Channel 15		Channel 16	
Byte 0 (MSB)	Byte 1 (LSB)	Byte 2 (MSB)	Byte 3 (LSB)	Byte 4 (MSB)	Byte 5 (LSB)	Byte 6 (MSB)	Byte 7 (LSB)

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## Sensor Dimensions



## Field of View

