

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 1100° 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 1100° 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	Base CAN ID's	
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

Infrared Temp, CH 1		Infrared Temp, CH 2		Infrared Temp, CH 3		Infrared Temp, CH 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

Infrared Temp, CH 5		Infrared Temp, CH 6		Infrared Temp, CH 7		Infrared Temp, CH 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

Infrared Temp, CH 9		Infrared Temp, CH 10		Infrared Temp, CH 11		Infrared Temp, CH 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)

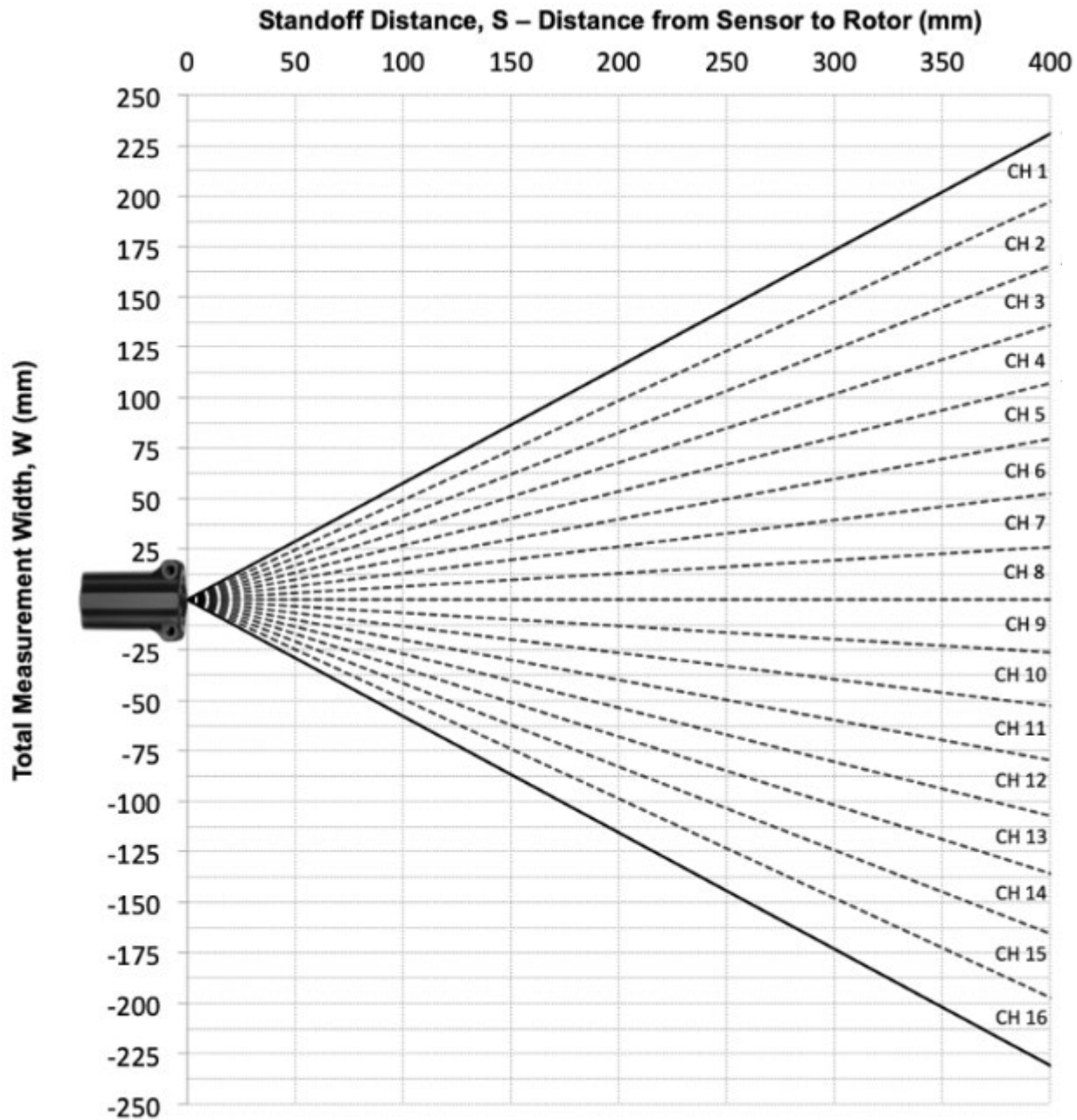
CAN ID: Base ID+3

Infrared Temp, CH 13		Infrared Temp, CH 14		Infrared Temp, CH 15		Infrared Temp, CH 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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Field of View



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Sensor Dimensions

