ALS Tire Wired

Advanced multi-channel infrared tire temperature sensor with CAN connectivity. Fully configurable, 16 temperature channels / tire with a refresh rate of up to 64Hz.

Knowing how the tire surface temperature evolves across a lap is invaluable for chassis tuning, driver training and tire selection.

Sensor

Temperature Range	-40 to +300°C
Channels	16, 8, 4 or 1 (configurable)
Accuracy	± 1°C
FOV	110°
Refresh Rate	1-64Hz (configurable)

Electrical

Supply Voltage	5 - 20V
Supply Current	15mA

Physical

Dimensions	48.5 x 25.5 x 12 mm
Weight	25g
Material	Aluminum or Polyamide-based
IP Rating	IP66
Operating Temperature	-40 to +85°C

Communications

CAN Standard	2.0A (11-bit identifier) or 2.0B
Bit Rate	500 Kbps (default) / 1 Mbps
Byte Order	Big-Endian (MSB first)
CAN Termination	Yes (configurable via jumper)
Base CAN Id	Default 0x300 (configurable via CAN)
Temperature Conversion	-200°C offset, 0.1°C / bit

* Please see ALS Tire Wired CAN Protocol document for full details regarding the communication protocol.

Wiring

Cable	0.5m AWG22 cable with DR25 jacket
Connector	DTM 4-pin (optional)