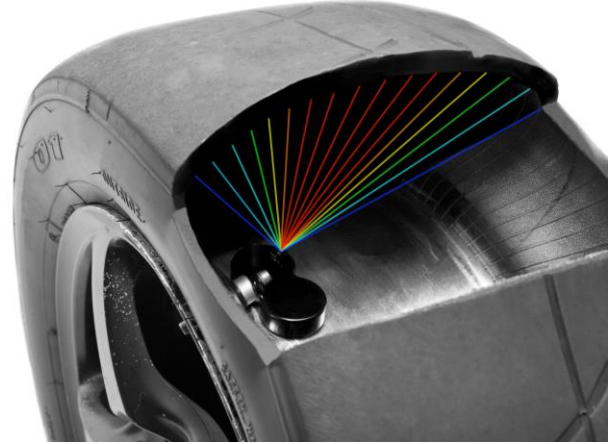




## Tyre Temperature and Pressure Monitoring System (TTPMS)

The wireless Tyre Temperature and Pressure Monitoring System (TTPMS) consists of small, lightweight, wheel-mounted sensors and an equally small receiver with a built in pressure transducer for high-accuracy gauge pressure measurements. The wireless sensor measures the lateral temperature distribution of the inner tyre carcass with an ultra-wide 16-channel infrared sensor and pressure with a high-resolution 24-bit pressure transducer, providing invaluable tyre data for motorsport and R&D applications. Receiver outputs the data using CAN 2.0A, The configuration of the Sensors and Receiver can be changed using the Brightwater setup tools.



### SPECIFICATIONS – TTPMS SENSOR

Pressure, Range (Gauge)	0 to 5000 mBar
Pressure, Resolution	1 mBar
Pressure, FS Accuracy (typ)	±10 mBar
Internal Temperature, Range	-40 to 150°C
Internal Temperature, Resolution	0.1°C
Internal Temperature, FS Accuracy	±1.0°C
IR Temperature, Range	-20 to 300°C
IR Temperature, Resolution	0.1°C
IR Temperature, Accuracy (typ)	±3.0°C
Sampling Period at Speed	1.2 seconds
Operating Temperature Range*	0 to 135°C
Battery Life (typ)	> 2 million transmissions
Encryption	AES-128
RF Frequency, Center	868 MHz
RF Output Power	1mW
Wireless Range, Open Space	> 100m

\*Will survive brief temperature excursions < 150°C

### SPECIFICATIONS – RECEIVER

Voltage Input	5 to 16 V
Supply Current	30 mA
Temperature Range	-20 to 85°C
Max No. of Sensors	120 (30 per corner)
RF Frequency, Center	868 MHz
Sensitivity (typ)	110dBm



### MECHANICAL SPECS – SENSOR

Weight	42 ± 1g
Material	7075-T6
Max. Centrifugal Accel.	2200G (SF = 3)
L x W x H (max)	73.5 x 37.5 x 19.5 mm
Protection Rating	IP61

### MECHANICAL SPECS – RECEIVER

Weight	17 ± 1g
Material	6061-T6
L x W x H (max)	50.5 x 35.5 x 8 mm
Protection Rating	IP65