

#### AVIORACE SRL via dell'Artigianato, 348 - 41058 Vignola (Mo) Italy Tel. 0597700253 - Fax 0597520181

# **TYRE WATCH RACING AR002-11**

System for real time detection, storage and monitoring of the tires temperature and pressure. It is available as bundle kit.

All the components can be separately purchased.

# **RECEPTION CONTROL UNIT (RCU)**

Control unit (RCU) and the antenna for detecting wheel sensors (WUS) signal. The RCU has an internal flash memory for data recording and downloading on pc with USB. I can be also connected to an external logger via CAN line or analogic channel.

#### **TECHNICAL SPECIFICATIONS:**

◆ Power Supply: 9 – 16 Vdc

Current Supply: 60 mA at 12V (max 100 mA in logging)

Trasmission: CAN line 2.0A, 1MBps

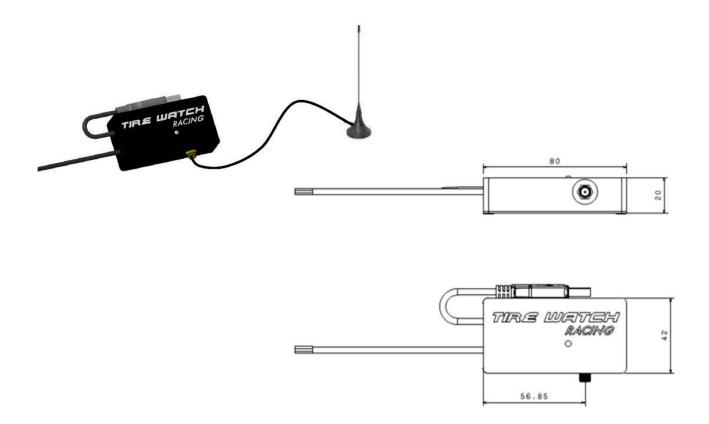
Size: 111x64x23 mm

Weight: 100 g

Working Temperature: -10 / 85 °C

External material: Aluminum case

Sensors reading frequency: 1 Hz





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#### WHEEL SENSORS (WUS)

Temperature and pressure detecting sensor, replacing the wheel's original valve. Each sensor transmits his identifying number for wheel matching. If no wheel movement is detected, the sensor switches in sleeping mode for energy save and no data are transmitted. Various valve sizes available.

#### **TECHNICAL SPECIFICATIONS:**

Sensor life: > 1 race season
Measuring pressure range: 0 - 3,5 bar
Pressure accuracy: ± 20 mbar
Monitored temperature range: -40 / 125 °C
Temperature accuracy: ± 2 °C
Weight: 47 g
Monitored acceleration range: 0 / 2000 G



• RF emission: FSK Manchester 434 Mhz (CEE), 9,6kbit/s

#### **LF TRIGGER**

Remote control with display to enable/disable wheels sensor transmission when the vehicle stops (refreshing every 5 sec.). Is possible to visualize all sensor data like ID, pressure, temperature and battery state.





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# **PADDOCK SURVEY**

System for monitoring wheels pressure and temperature inside the paddock with the dedicated pc software. Every wheel must have its own sensor. The system is made of an antenna, a pc USB interface and the relative software.



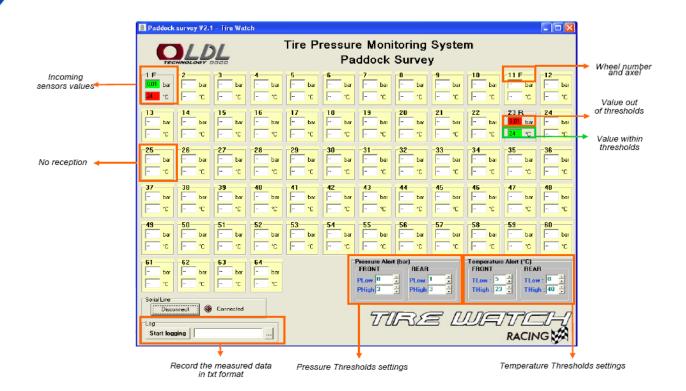
### **TECHNICAL SPECIFICATION:**

- Refresh time 20 sec
- Temperature and pressure thresholds setting for each axle
- Data can be saved in a .txt file



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# **WIRELESS DISPLAY**

Display for real time checking of wheel pressure and temperature. Alert mode led threshold can be set by the user. Back light can be disabled for power saving, the display can be fixed in the vehicle cockpit to inform the driver about the real time status of the wheels (best grip).

The light weight and small allow to handle fix with the specific belt.



#### **TECHNICAL SPECIFICATIONS:**

LCD display size: 35x20 mm
Case size: 70x45x25 mm

Wheight: < 85 g

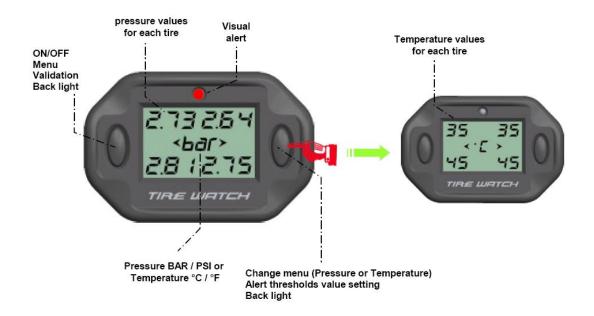
Internal battery: Button battery CR2450

Case material: Plastic



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# **ORDER REFERENCE**

CODE	DESCRIPTION	NOTE
AR002 – 11 – 01	Receive control unit	
AR002 - 11 - xx	Wheel sensor	Specify valve diameter
AR002 – 11 – 02	LF Trigger	
AR002 – 11 – 03	Paddock survey	
AR002 – 11 – 04	Wireless display	