

Automotive Pressure & Temperature Transmitter VS50



Measures and transmits tyre pressure and temperature, providing continuous monitoring of tyres during test, development and race conditions. Operates with TMS AS Receiver. Installs in a standard 11.3mm or 8.8mm valve hole compliant with ETRTO standards. Transmitted data is encrypted and carries a unique serial number ensuring reliable error free data transmission. Each sensor is individually calibrated to a traceable standard, resulting in high accuracy across the operating temperature range (-20 to +150°C).

Pressure measuring range	0..2.5bar (0..38psi) Optional 3.5bar, 5.0bar, 10bar
Measuring resolution	2.5mbar (0.04psi)
Pressure accuracy	+/- 0.5%
Temperature measuring range	0..150°C (32..302°F)
Resolution	1°C
Housing	Moulded plastic
Weight	23g (excluding valve stem)
Transmit rate	Adaptive (see text) up to 1Hz
Battery	Lithium Thionyl cell
Battery Life	>1,500,000 Transmissions
Radio Frequency	433.92MHz
RF Emission category	MPT1340, ETS 300-220
Typical TX range	20m (free space)

Operating modes

- Active mode - When pressure is above 0.17bar (2.5psi) and temperature is above active threshold (typically 30°C). Transmit interval 1sec. (2 sec option, extended battery life)
- Power save mode - When pressure is above 0.17bar (2.5psi) and temperature is below active threshold. Transmit interval 30sec. If pressure change ≥ 25 mbar additional transmissions made.
- Sleep Mode - If pressure is below 0.17bar (2.5psi) the sensor makes no transmissions.
- Expected battery life:>1,800,000 transmissions (approx. 750hrs active, 9,000hrs power save, 15,000hrs sleep mode). Battery replacement can be carried out by factory or authorised service agent

Ordering Information:	Order Code	Description
	301200301	TMS Valve sensor VS50, 11.3mm valve stem
	301200302	TMS Valve sensor VS50, 8.8mm valve stem
	301210102	Battery & Antenna change

Request further information: Installation drawing VS50
ETRTO valve hole drawing
TMS AS Receiver data sheet