

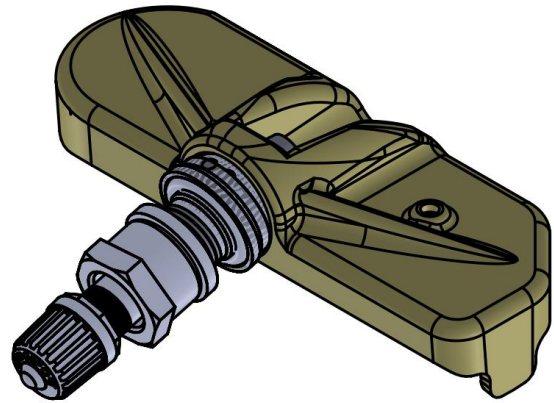
TPMS-RS-AB	
TPMS Sensor	
Ref: TPMS-RS-AB	
SN: U##### to U#####	Software version: v#.#

Texys sensors are designed for data recording. If the user wants to include this sensor in a close loop system or active control, he must assume all responsibility.

Pressure measurement			
Range	800 to 4000	mbarA	
Accuracy	±20	mbar	
Resolution	0.2	mbar	
Max proof pressure	9	barA	
Internal temperature measurement			
Range	0 to 150	°C	
Accuracy	±0.5	°C	
RF features			
RF Frequency	433 MHz		
RF Emission power	8 dBm		
Electrical features			
Battery Rating Voltage	3.6	V	
Battery capacity @25°C	550	mAh	
Max current consumption @25°C	Production storage	2	µA
	Stationary mode (0.1Hz)	10	µA
	Moving mode (1Hz)	80	µA
	Transient mode (2Hz)	150	µA
Common features			
Dimensions (without valve)	85.3 x 31.7 x 24.2	mm	
Material	PEEK 450GL30		
Weight (with battery, without valve)	35±2	g	
Protection	IP42		
Vibration test	20Gpp 5'		
Shock	500	G	
Operating Temp	-20 to +125	°C	
Absolute Temp	-40 to +135	°C	

Pressure sensor readings	
Reference	Measure
2000 mbarA	mbarA
2400 mbarA	mbarA
2800 mbarA	mbarA

Setup parameters		
Corner	Front Left	
Car ID	00	-
Acc threshold high	19	G
Acc threshold low	5	G
P threshold high	1400	mbarA
P threshold low	1350	mbarA
Puncture threshold	30	mbar
Transient mode duration	30	s
Temp threshold high	50	°C
Temp threshold low	45	°C
Auto-sleep time	Disabled	h
Idle timeout	120	s

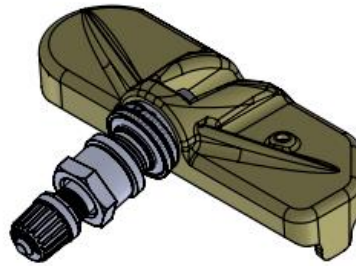
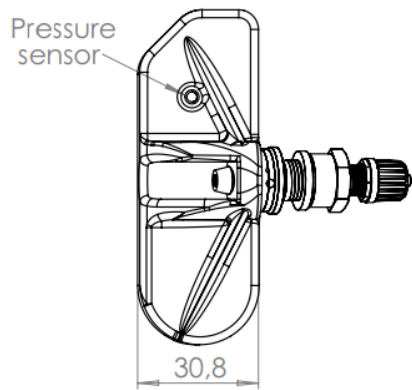
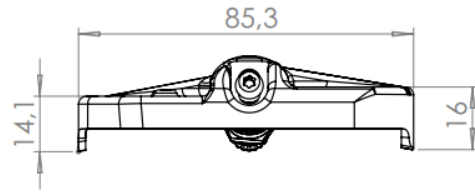
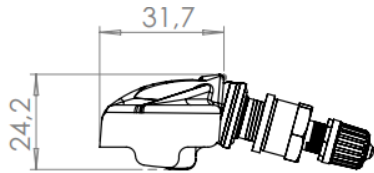


Monitoring parameters

Sensor parameters:

N°	Parameter	Raw values	Comments	Default value
0x80	Configuration version	0x00 to 0xFF		2
0x81	Software version major	0x00 to 0xFF		1
0x82	Software version minor	0x00 to 0xFF		00
0x83	Unused			
0x84	Serial number	0x00 to 0xFF	MSB	-
0x85		..	..
0x86		..	..
0x87		0x00 to 0xFF	LSB	
0x88	Production storage lifetime counter1 (1 minute/bit)	0x00 to 0xFF	MSB	-
0x89		..	..
0x8A		..	..
0x8B		0x00 to 0xFF	LSB	
0x8C	Stationary cold mode lifetime counter (30 seconds/bit)	0x00 to 0xFF	MSB	-
0x8D		..	..
0x8E		..	..
0x8F		0x00 to 0xFF	LSB	
0x90	Stationary hot mode lifetime counter (30 seconds/bit)	0x00 to 0xFF	MSB	-
0x91		..	..
0x92		..	..
0x93		0x00 to 0xFF	LSB	
0x94	Moving mode lifetime counter (1 second/bit)	0x00 to 0xFF	MSB	-
0x95		..	..
0x96		..	..
0x97		0x00 to 0xFF	LSB	
0x98	Transient mode lifetime counter (500ms/bit)	0x00 to 0xFF	MSB	-
0x99		..	..
0x9A		..	..
0x9B		0x00 to 0xFF	LSB	
0x9C	Unused			
0x9D	Car ID	0 to 254	-	0
0x9E	Tyre position / corner	0x00	Front Left	default
		0x01	Front Right	
		0x02	Rear Left	
		0x03	Rear Right	
0x9F	Tyre type	0x00	Unknown	default
		0x01	Super soft	
		0x02	Soft	
		0x03	Medium	
		0x04	Hard	
		0x05	Wet	
0xA0	Accelerometer high threshold (1G/bit)	0x00 to 0xFF	-	0x13 (19G)
0xA1	Accelerometer low threshold (1G/bit)	0x00 to 0xFF	-	0x05 (5G)
0xA2	Pressure high threshold(1mbarA/bit)	0x0000 to 0xFFFF	MSB	0x0578 (1400 mbarA)
0xA3			LSB	
0xA4	Pressure low threshold (1mbarA/bit)	0x0000 to 0xFFFF	MSB	0x0546 (1350 mbarA)
0xA5			LSB	
0xA6	Pressure variation threshold (mbar/bit)	0x0000 to 0xFFFF	MSB	0x0019 (30mbar)
0xA7			LSB	
0xA8	Transient mode duration (1s/bit)	0x00 to 0xFF	-	0x1E (30s)
0xA9	Temperature high threshold (1°C/bit)	0x00 to 0xFF	-	0x32 (50°C)
0xAA	Temperature low threshold (1°C/bit)	0x00 to 0xFF	-	0x2D (45°C)
0xAB	Unused			
0xAC	Auto-sleep duration (1min/bit)	0x0000 : Disabled 0x0001 to 0xFFFF	MSB	0x0000 (disabled)
0xAD			LSB	
0xAE	Idle timeout (1s/bit)	0x0000 to 0xFFFF	MSB	0x0078 (120 seconds)
0xAF			LSB	

Mechanical design



SN	Measurements		
	2000 mbars	2400 mbars	2800 mbars