



## Operational Description

### Constitution of the Tire Pressure Monitoring System for vehicle

Tire Pressure Monitoring System is the system that receives the information, from transmitters installed at each tire, about the inflation pressure or temperature of tires detected by the sensor, so that the system can detect the abnormality of tires like fallen inflation pressure. This system consists of transmitter, receiving antenna, and receiver.

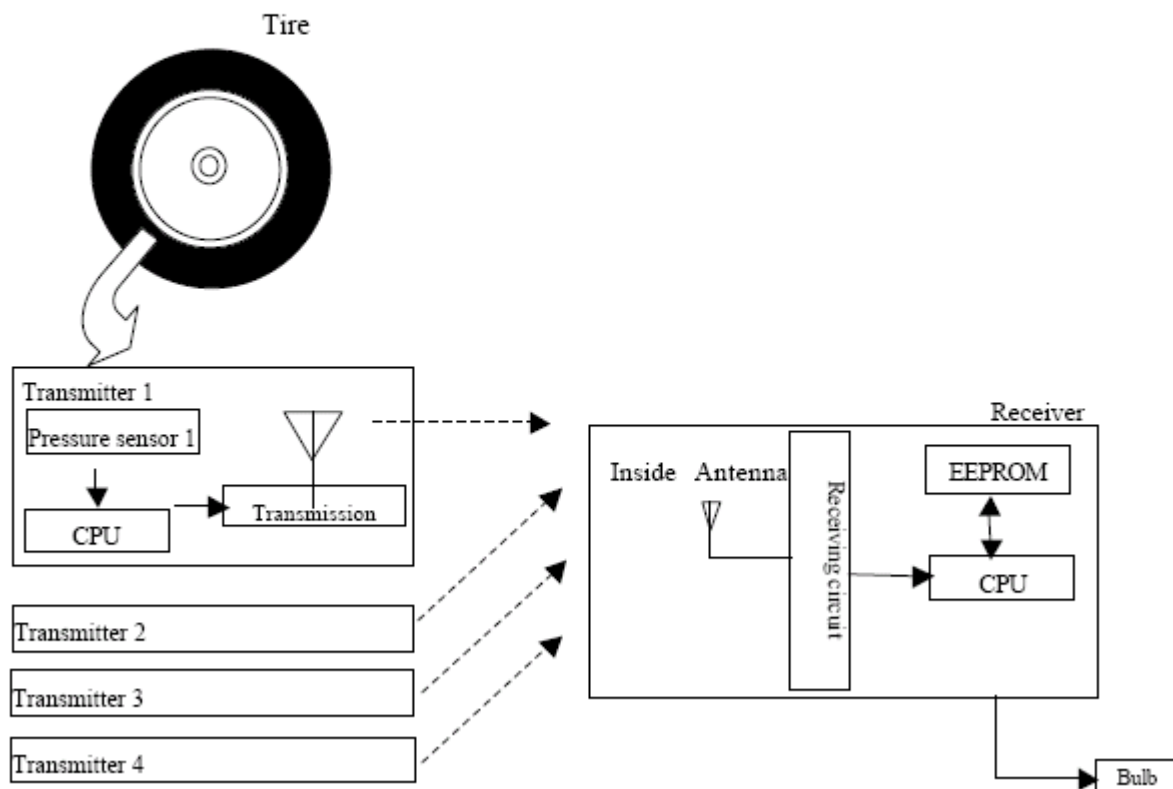
The transmitter sends information of tire, read by the sensor, in the form of radio wave at constant intervals. When the receiver detects the synchronous code and IG is ON, it runs continuously to receive the signals completely. If the received code is normal, the system will not inform the user. As shown below, in the case that the transmitter sends information that the tire is in abnormal condition, and that the receiver system has a trouble, the system will inform the user with lighting up Warning bulb.

TPMS Warning bulb is lit by the following situations.

Bulb disconnection detection output (The warning light is On for 3 sec. when IG=OFF→ON)

Tire air pressure warning output (Warning light is ON)

System warning output (Warning light is blinking)





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## ANTENNA

Tx : Loop Coil Antenna for 125kHz transmitter.

Rx : PCB Pattern Antenna for 315MHz Receiver

## SPECIFICATION

|                        |                                                                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| CASING                 | Dark gray color<br>High strength ABS material                                                                                                           |
| LCD SPEC.              | 320 by 240 resolution<br>LED Backlight type<br>Standard character output :40 columns 12 Lines                                                           |
| KEYPAD                 | Power ON /OFF Key, Soft Function 6 Keys, Arrow 4 Keys, Fixed Functional 4 Keys<br>NUMBER 0~9 KEY(10), Enter,ESC,YES/NO Key.<br>Type : Soft Touch Keypad |
| MEMORY CAPACITY        | Internal Memory :<br>16 Mbytes Built-in memory                                                                                                          |
| OPERATION VOLTAGE      | 7 – 36 VDC INPUT                                                                                                                                        |
| OPERATING TEMPERATURE  | 0°C -50°C                                                                                                                                               |
| DLC COMMUNICATION LINE | TPMS K-Line<br>CAN<br>SAE-J1850                                                                                                                         |
| DIMENSION              | Width : 125mm<br>Length : 223mm<br>Depth : 68/43mm (neck part)                                                                                          |
| BATTERY                | SMART LI-ION BATTERY, 7 HOUR LIFE                                                                                                                       |
| FREQUENCY              | Tx:125KHz(AM), Rx: 315MHz(AM/FM)                                                                                                                        |
| POWER CONSUMPTION      | 3.6 Watts                                                                                                                                               |