

Indice	Date	Status	Evolutions
A0	08/01/07	Creation	establishment

OPERATIONAL DESCRIPTION

HOM-RF-07-0011-LDL

Référence primaire

A0

Ind.

Description :

This document describes the operational description

Nom du fichier : OpDes.odt

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Contents

1	Object.....	3
2	Documents.....	3
2.1	Applicable documents	3
2.2	Reference documents.....	3
2.3	Terminology & abbreviations.....	3
2.3.1	Terminology.....	3
2.3.2	Abbreviations.....	3
3	DESCRIPTION OF THE RF TRANSMITTER.....	4
4	POWER SUPPLY.....	4
5	TRANSMISSION FORMAT.....	4
6	OSCILLATOR.....	4
7	DATA OF THE TRANSMITTER.....	4

1 OBJECT

This document describes the operational description

2 DOCUMENTS

2.1 Applicable documents

index	Primary Reference	Title	§ referenced Doc.	§ User
[DA1]			-	-
[DA2]			-	-
[DA3]			-	-

2.2 Reference documents

index	Primary Reference	Title	§ Referenced Doc.	§ User
[DR1]			-	-

2.3 Terminology & abbreviations

2.3.1 Terminology

Not relevant.

2.3.2 Abbreviations

WUS	Wheel Unit Sensor
DAC	Digital analog converter
RF	Radio Frequency
FSK	Frequency shift keying
µC	Micro Controleur
PCB	Printed Circuit Boards
DSP	Display

3 DESCRIPTION OF THE RF TRANSMITTER

The pressure and temperature information are transmitted by the WUS.
 The transmitter is a single chip. It contains a fully integrated PLL synthesizer and a high efficiency power amplifier to drive an antenna.

4 POWER SUPPLY

The transmitter is power supplied by a +3V Lithium battery (CR2450).
 The power of the batteries is checked for each transmitted telegram.
 The low tension detection is determined by an integrated DAC within the microcontroller.
 The battery inversion is protected mechanically.

5 TRANSMISSION FORMAT

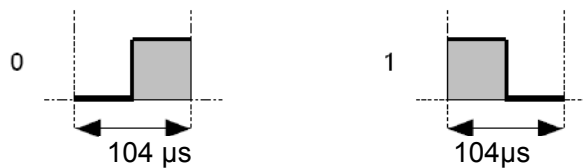
The telegram is Manchester coded. The RF code telegram changes with every new transmission.
 The transmission rate is tuned to 9,6 kBaud.

6 OSCILLATOR

The PLL is stabilised by a Quartz. The frequency is 315 MHz +/-100ppm

7 DATA OF THE TRANSMITTER

Type : **Manchester code**
 Bit duration is 104 µs, Tx rate is 9,6 kbaud.



8 MESSAGE STRUCTURE

The message is transmitted every minute

