

## OPERATIONAL DESCRIPTION EXCERPT FROM TEST REPORT

This RF transmitter works with a battery voltage of 3V. A single lithium battery of type CR2032 will be used. The microcomputer (I001) monitors the transmitter keypad buttons and generates the corresponding data word when a button is pressed. To meet high security requirements, the data word is encoded using an 64 bit encryption algorithm. The transmitter identification data is stored in a non-volatile memory (EEPROM) I003. The data word is sent to the final transmitter (a stage of IC002) in a serial pulse form, Manchester encoded. The pulse train switches the RF power amplifier on and off. The RF emission is independent of the data content of the switched carrier which has a duty cycle of 0.5 during the pulse trains without considering the breaks between two subsequent pulse trains of an actuation. The transmitter antenna is realized in the form of a magnetic loop. The transmission frequency of 315 MHz is generated by a quartz stabilized PLL oscillator which is also part of IC002.