

Analysis Report

The equipment under test (EUT) is the Remote Sensor transmitter of the weather station operating at 433.92MHz. The EUT is powered by 3.0VDC (2X 1.5V "AA" batteries). The EUT will transmit RF signal to the corresponding receiver and the receiver will display the humidity and temperature on the screen of the receiver.

433.92MHz portion

Antenna Type: Internal, Integral

Antenna Gain: 0dBi

Modulation Type: Pulse Modulation

Frequency Range: 433.92MHz, single channel

EIRP range is -25dBm to -15dBm

According to the KDB 447498:

Conducted Power (max) = EIRP – Antenna gain

= -15 dBm – 0dBi

= -15 dBm (0.032 mW)

The SAR Exclusion Threshold Level:

= $3.0 * (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in GHz})$

= $3.0 * 5 / \text{sqrt}(0.43392)$ mW

= 22.77 mW

Since the above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.