

Declaration regarding RF Exposure

Federal Communication Commission
Equipment Authorization Division, Application Processing Branch
7435 Oakland Mills Road
Columbia, MD 21048

March 17, 2015

TO WHOM IT MAY CONCERN

RF Exposure issue for any portable devices subject to 2.1093 routine evaluations regarding the following product:

<u>FCC ID Number</u>	<u>Product Title/Model</u>
DMOEKP1G9WE	EKP AVX

SAR exemption:

This device has been excluded from SAR testing based on source-based time-averaged conducted output power and KDB 447498 D01 section 4.3.1 1).

This document serves as the RF exposure exhibit in the FCC Form 731 application in lieu of a SAR report.

Operational Description:

The EKP AVX is a portable wireless transceiver operating in the DECT/UPCS band capable of receiving audio as well as sending control commands.

UPCS Channel	Frequency (GHz)
23	1.921536
24	1.923264
25	1.924992
26	1.926720
27	1.928448

RF Exposure Conditions:

The device is intended for use in the portable exposure condition and the General Population / Uncontrolled RF exposure environment.

Transmission Mode:

The above mentioned device uses the DECT wireless communication technology with a maximum of 1 TDMA long-slot out of the 24 total slots.

The device has no roaming and no multi line capabilities. All supported multiple time slot transmissions are considered in the calculation below.

The slot and frame structure is defined by the DECT standard resulting in a maximum transmit long-slot number of 1.

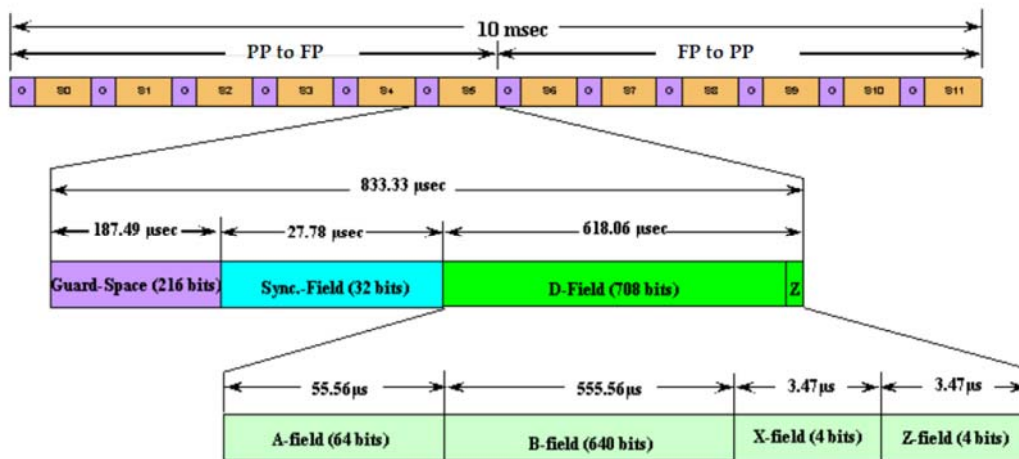
The device is using 1 long-slot out of a total of 12 (656us in 10ms frame) resulting in a duty-cycle of 6.56%.

Slot length (SL):656 us, frame length (FL):10 ms, max. no. of slots per frame (N): 1

dc – duty cycle / factor

6.56%

SL X N/FL



RF Output Power:

Tx frequency range: 1921.536 ~ 1928.448MHz

Test separation distance: 5mm

Maximum Output Power: 17.9 dBm (61.7mW)

Maximum Duty Factor: 6.56%

Source-based time-averaged conducted output power is 4.04mW

Pt - Transmitted output power (rms peak)

17.9

dBm

dc – duty cycle / factor

6.56%

SL X N/FL

Production tuning range

 17.5 ± 1

dBm

$$P_{source \text{ based time average, max}}$$
 $P_t dc$

4.64mW

With a transmitted output power of 70.79mW (18.5dBm) the source-based time-averaged conducted output power is 4.64mW.

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f_{\text{(GHz)}}}] \leq 3.0/7.5 \text{ respectively}$$

- $f_{\text{(GHz)}}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation²⁵
- The result is rounded to one decimal place for comparison

$$\frac{4.64mW}{5mm} * \sqrt{(1.924)} = 1.29 \leq 3$$

The device is excluded from SAR testing.

