ISRAEL TESTING LABORATORIES
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FCC RF Exposure report

1. Product information

FCC ID	2A6DICONNECT
Product	Vehicle Telematics System
Model No.	Connect Family
Power supply	12 VDC/24 VDC from car battery 3.6 VDC rechargeable battery
Antenna type	PCB
Antenna gain	-2.9 dBi (-5.0 dBd)
Assigned frequency range	Above 70 MHZ
Operating frequency range	433.92MHZ
Transmit power (conducted)	~ 12dBm
Modulation bandwidth	328 kHz
Bit rate	250 kBaud
SAR exclusion considerations	A worst-case test separation distance of 150 cm

2. Evaluation Method and Limit

FCC, Part 1, Subpart I, Section 1.1310(e)(1), RSS 102, Issue 5, Section 2.5.2 (table 4 requirements), KDB447498 D01 V06 (October 23, 2015)

According to KDB447498 D01 General RF Exposure Guidance v06 Section 4.3.1, the standalone SAR test exclusion considerations are: “Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition, listed below, is satisfied.

The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander (see 5) of section 4.1)."

For MPE evaluation will take the following E.U.T. values:

1. Max. power (conducted)= 12dBm = 15.8mW
2. Antenna gain: -5 dBd = 0.3
3. Minimum distance from human body: 150.0cm=1.5m
4. The power density was calculated using the following formula: $S = \frac{P_t G_t}{4\pi R^2}$

where:

S: Power density (mW/cm^2)

P_t: Conducted Transmitted Power (mWW)

G_t: Antenna Gain (numeric)

R: Distance from Transmitter (cm)

3. FCC Test Limit

Limits for General Population/Uncontrolled Exposure:

Frequency range (MHz)	Power density (mW/cm^2)	Averaging time (min)
300-1500	f/300=433.92/1500=0.28	< 30

4. Test Results

Frequency (MHz)	FCC calculation (mW/cm ^{2})	FCC limit (mW/cm ^{2})	Verdict
433.92	$S = \frac{P_t G_t}{4\pi R^2} = \frac{[15.8 \times 0.3]}{[4 \times 3 \times (150^2)]} = 0.017$	<0.28	Pass

5. Conclusion

The measurement results comply with the Limit per FCC, Part 1, Subpart I, Section 1.1310(e)(1), RSS 102, Issue 5, Section 2.5.2(table 4 requirements) KDB447498 D01 V06 (October 23, 2015).

End of Report