

Subject: FW: Questions regarding FCC ID: E9UDSMODEM-RTC
Date: Tue, 17 Apr 2001 12:18:26 -0600
From: "Joseph W. Jackson" <jwj@cclab.com>
To: "Scott Earl" <sbe@cclab.com>

Scott,

Here is the Gil response.

Best Regards,

-----Original Message-----

From: Estrella Gil-P19838 [mailto:Gil.Estrella@motorola.com]
Sent: Tuesday, April 17, 2001 12:01 PM
To: Joe Jackson (E-mail)
Subject: Questions regarding FCC ID: E9UDSMODEM-RTC

Joe,

I received your voice mail and the responses to your questions are provided below:

1) Motorola Smartcard Solutions Korea (MSSK) has taken the position that professional installation of the device is required and this fulfills the requirements per Section 47 CFR 15.203. This statement is included in the users manual as Section 3.1.1. If additional information or documentation is necessary for a professionally installed product please advise.

2) Attached are the specifications, including gain, for the two types of antennas used with the DSModem.

<<KDC ant specs.doc>>

Thanks again and let me know if you have further comments or questions.

Regards,

Gil Estrella

Motorola IISG

8201 E. McDowell Rd. M/S H2550
Scottsdale, AZ 85252

Phone: 480-441-3725 Pager: 602-360-4001

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EMail: Gil.Estrella@motorola.com

Name: KDC ant specs.doc
KDC ant specs.doc Type: WINWORD File (application/msword)
Encoding: base64

MOBILE ANTENNA SPECIFICATIONS

MODEL #400
(Suction – Cup Antenna)

ELECTRICAL ITEM	SPECIFICATIONS	REMARKS
Type of antenna	Whip antenna	
Frequency range	902 –928 MHz	Center Freq.: 915 MHz
Nominal Impedance	50 Ohms	
Polarization	Vertical	
V.S.W.R.	Less than 1.5	Frequency range
GAIN	2 dBi	

Manufacturer: Hankook Antenna Co. Ltd.

STATION MODEM ANTENNA SPECIFICATIONS

ANTENNA MODEL: KE-900-GP		
ELECTRICAL DATA	SPECIFICATIONS	
TYPE OF ANTENNA	WHIP ANTENNA	
FREQUENCY RANGE	TX	898 – 900 MHz
	RX	938 – 940 MHz
NOMINAL IMPEDANCE (Ohms)	50	
ELECTRICAL LENGTH	$5/8 \lambda \times 3$	
RADIATION PATTERN	OMNI-DIRECTIONAL	
POLARIZATION	VERTICAL	
V.S.W.R.	Less than 1:1.7	
GAIN (dB)	7.5	
CONNECTOR	N Type Connector	

Manufacturer: KEOSAN Electric Co.

-----Original Message-----

From: Estrella Gil-P19838 [mailto:Gil.Estrella@motorola.com]

Sent: Wednesday, April 18, 2001 1:40 PM

To: 'jwj@cclab.com'

Subject: RE: TCB Review Of DSModem Product

Joe,

As I read the TCB exclusion list requirements, it appears to me that the 300 mW power output limit is for MOBILE devices only. The 7.5 dBi gain antenna

is used only with the Station Modem which is a fixed (base) transmitter for which the antenna is intended to be fixed-mounted on top of a building.

This provides a 2 meter separation during normal operation as required.

The Mobile DSModem uses the 2 dbi gain suction cup antenna which is within

the 300 mW power limits required for mobile devices, i.e. intended to provide the minimum 20 cm separation during normal operation.

We had reviewed these requirements with Roger Midgley before his departure

and prior to submitting the DSModem to CCL for approval to assure that CCL

was able to approve these devices.

Even so, I've attached are the antenna drawings for the two types. The peak

output power for the Station Modem was measured at +18.54 dBm. The cable

drawing (attached) for use with the whip antenna (7.5 dBi) specifies a minimum of 5 meters length for this cable. This would provide a minimum of

3 dB loss. With this taken into account the EIRP is calculated more closely to be around 201 mW.

I hope this information allows you to continue the DSModem filing. It would

a major schedule impact to have to restart this entire process with the FCC.

Please let me know your final decision as soon as possible.

Regards,

Gil Estrella

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