eurofins | ETS Product Service GmbH

Maximal Permissible Exposure

FCC ID: SGH1409G

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy in excess limit for maximum permissible exposure.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 and RSS-102 this device has been defined as a mobile device whereby a distance of 0.2, normally can be maintained between the user and the device.

The following calculation presents the exposure value against the limits for occupational / controlled use.

name			nature value	log value	nature value
max conducted power			1,35 mW	1,30 dBm	1,35 mW
max Antenna gain dBi			1,62	2,10 dBi	1,62
max Antenna gain dBd			0,99	dBd	0,99
calculated radiated power		EIRP	2,19 mW	3,40 dBm	2,19 mW
		ERP	1,33 mW	1,30 dBm	1,35 mW
measured radiated power		EIRP	1,00 mW	dBm	1,00 mW
		ERP	1,00 mW	dBm	1,00 mW
duty cycle factor					
frequency	2400 MHz				
dwell time			100 ms		
Time of occupancy/puls-train time			100 ms		
duty cycle factor	10log(dwell time/100 ms)		**100,00%**	0,00 dB	1,00
max source-based time-averaged power					
conducted power			**1,35** mW	1,30 dB	1,35 mW
calculated radiated power		EIRP	**2,19** mW	3,40 dB	2,19 mW
measured radiated power		EIRP	**1,00** mW	0,00 dB	1,00 mW

M P E

$$S = \frac{PG}{4\pi R^2}$$

calculated with max source-based time-averaged power measured condacted power

r [cm]	20	2,5	1,5	**0,417**
S [mW/cm²]	**0,000**	**0,028**	**0,077**	1

Limit general population		[mW/cm²]	1,000
Limit occupational population		[mW/cm²]	5,00 for f = 2400 MHz

$$S = \frac{EIRP}{4\pi R^2} = \frac{1.64\ ERP}{4\pi R^2} = \frac{0.41\ ERP}{\pi R^2}$$

calculated with max source-based time-averaged power measured radiated power

r [cm]	20	2,5	1,5	
S [mW/cm²]				1

LinTech GmbH
Kommunikationstechnologien

LinTech GmbH · Friedrich-Engels-Straße 35 · D – 13156 Berlin

Federal Communications Commission
Authorization and Evaluation Division
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

Applicant`s declaration concerning RF radiation exposure

We hereby indicate that the Bluetooth serial port adapter is considered to be a mobile transceiver.

The external antennas used for this mobile transceiver must provide a separation distance of least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

A safety statement concerning minimum separation distances from enclosure of Bluetooth serial port adaptor will be integrated in user´s manual to provide and-users with transmitter operting conditions for satisfying RF exposure compliance.

Company: LinTech GmbH

Address: Friedrich-Engels-Str. 35

City: Berlin

ZIP: D – 13156

Country: Germany

Place: Berlin Date: 08-07-28

Signature: .....
Uwe Lindner

Telefon: +49 (030) 54 94 72 60
Telefax: +49 (030) 54 94 72 44
Internet: www.LinTech.de
e-mail: LinTech@LinTech.de

Amtsgericht
Berlin Charlottenburg
HRB 55865

Geschäftsführer: U. Lindner
Prokurist: Susanne Meinel
Prokurist: Bernd Sobeck

Landesbank Berlin
BLZ 100 500 00
KNr. 4 123 437 066

Berliner Volksbank
BLZ 100 900 00
KNr. 5 745 396 005