

Robert Bosch LLC  
38000 Hills Tech Drive  
Farmington Hills  
USA

Abdellah Ahakki  
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Phone +49 (0) 2102 749 285  
Fax +49 (0) 2102 749 350

**Maximum Permissible Exposure according to FCC 15.247 - VIPHI2BT**

Dear Mr. Nicolai Muellendorff,

please find our Maximum Permissible Exposure calculations for BRP VIP Cluster  
"VIPHI2BT".

Best Regards



Abdellah Ahakki

## VIPHI2BT MPE calculation

**Model number: VIPHI2BT**  
**FCC ID: 2AMJS-VDIBRHS01**  
**IC: 22868-VDIBRHS01**

According to FCC §15.247(b)(4) and §1.1310(b)(1), systems operation under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission’s guidelines.

### MPE Prediction

<i>Frequency range (MHz)</i>	<i>Power density (mW/cm<sup>2</sup>)</i>
300 – 1500	f/1500
1500 - 100000	1 mW/cm <sup>2</sup>

### Calculation for Bluetooth (UGKZ7A1001A)

Equation for calculation

$$S = P * G / (4\pi R^2)$$

Where: S – Power density  
P – Power input to antenna  
G – Antenna gain relative to isotropic radiator  
R – Distance to antenna

Maximum peak output power at antenna terminal: 0.00083 W  
Antenna gain: 4.5 dBi  
Prediction distance: 20cm  
MPE limit for General Population/Uncontrolled Exposure: 1 mW/cm<sup>2</sup>

### Intermediate results:

Power density at 20cm distance: **0.0005 mW/cm<sup>2</sup>**

### Calculation for Bluetooth (UGXZEX304A)

Equation for calculation

$$S = P * G / (4\pi R^2)$$

Where: S – Power density  
P – Power input to antenna  
G – Antenna gain relative to isotropic radiator  
R – Distance to antenna

Maximum peak output power at antenna terminal: 0.00083 W

Antenna gain: -0.5 dBi

Prediction distance: 20cm

MPE limit for General Population/Uncontrolled Exposure: 1 mW/cm<sup>2</sup>

#### **Intermediate results:**

Power density at 20cm distance: **0.0001 mW/cm<sup>2</sup>**