

RF Exposure / SAR Statement

No. : 13977035S

Applicant : ALPS ALPINE CO., LTD.
Type of EUT : Head unit
Model Number of : AH00ICB
FCC ID : A269ZUA165

ALPS ALPINE CO., LTD. declares that Model : AH00ICB complies with
FCC radiation exposure requirement specified in the FCC Rules 2.1091(for mobile).
AH00ICB is intended to be used Bluetooth and Wireless LAN simultaneously within 20 cm.

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the “AH00ICB” as calculated
from FCC Part 1, §1.1310, TABLE 1 (B) Limits for General Population / Uncontrolled Exposure.
This calculation is based on the highest EIRP possible from the system,
considering maximum power and antenna gain, and considering a 1.0mW/cm² uncontrolled exposure limit. The Friis formula used was:

$$S1 = (P1 * G1) + (P2 * G2) + (P4 * G4) / (4 * \pi * r^2)$$
$$S2 = (P1 * G1) + (P3 * G3) + (P4 * G4) / (4 * \pi * r^2)$$

Where

P1 =	11.46 mW (Maximum average output power) *1)	
P2 =	0.82 mW (Maximum average output power) *2)	
P3 =	2.40 mW (Maximum average output power) *3)	
P4 =	25.06 mW (Maximum average output power) *4)	
G1 =	1.87 Numerical Antenna gain; equal to	2.71 dBi *1)
G2 =	0.95 Numerical Antenna gain; equal to	-0.20 dBi *2)
G3 =	0.95 Numerical Antenna gain; equal to	-0.20 dBi *3)
G4 =	0.95 Numerical Antenna gain; equal to	-0.20 dBi *4)
r =	20.0 cm	

For: AH00ICB (Wireless LAN (5 GHz band and 2.4 GHz band) and Bluetooth)	S1 = 0.00917 mW/cm²
For: AH00ICB (Wireless LAN (5 GHz band and 2.4 GHz band) and Bluetooth LE)	S2 = 0.00947 mW/cm²

Even taking into account the tolerance, this device can be satisfied with the limits.

- *1) Wireless LAN (5 GHz band) value
- *2) Bluetooth value
- *3) Bluetooth LE value
- *4) Wireless LAN (2.4 GHz band) value

This calculation was made to show that the EUT complies with the limit in simultaneous transmitting of
Wireless LAN (5 GHz band) and Wireless LAN (2.4 GHz band) and Bluetooth and Bluetooth Low Energy.

UL Japan, Inc.
Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN
Telephone : +81 463 50 6400
Facsimile : +81 463 50 6401