

**Annex acc. to FCC Title 47 CFR Part 15
relating to
Bernstein AG
IW50-RT1SK65**

Annex no. 12

RF exposure

**Title 47 - Telecommunication
Part 15 - Radio Frequency Devices
Subpart C – Intentional Radiators
ANSI C63.4-2014
ANSI C63.10-2013**



Deutsche
Akkreditierungsstelle
D-PL-12053-01-00

Radio frequency hazard

Regulation

15.247(i) 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 levels in excess of the Commission's guidelines.

The limit for Maximum Permissible Exposure (MPE) specified in FCC 1.1310 and in RSS-210 Issue 5 Table 4.

Test result

MPE calculation to the FCC ID: 2ABA6RT1

These equations are generally accurate in the far field of an antenna but will over predict power density in the near field, where they could be used for making a “worst case” prediction.

$$S = PG/4\pi R^2 \quad \text{or} \quad S = EIRP / (4\pi R^2)$$

Where

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units e.g. mW)

G = power gain of the antenna in the direction of interest relative to the isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units e.g. cm)

EIRP = equivalent isotropically radiated power

Calculation:

Radio frequency hazard						
Frequency	Max. EIRP		Distance	Calculated Power Density	Limit	Margin
MHz	dBm	mW	cm	mW / cm ²	mW / cm ²	mW / cm ²
902.150	1.88	1.54	20	0.00031	0.274	0.27369
914.650	1.66	1.47	20	0.00029	0.276	0.27371
926.650	1.65	1.46	20	0.00029	0.279	0.27371
*Limit: the reference level for general public exposure according to the OET Bulletin 65, edition 97-01 Table 1. and according to FCC 1.1307 (b) and RSS-102 Issue 5. The stricter limit was used!						

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.