

MPE exemption letter according Interim procedure KDB 447498 D04

Customer	Product	Model	Type	HW Status	SW status	FCC ID
Alois Kober GmbH, Ichenhauser Straße 14, 89359 Kötzing Germany	E&P levelsystem	E&P levelsystem Main unit	Main unit Camper/Caravan	Rev. 1.9	V3.14	2A5AD- 4100970 (RC 12V USA VS30)

Declared minimum distance to human body according to customer ≥ 20 cm according customer's document "MPE Main-unit".

The customer thus declares that the device is not body-worn.

According 1.1307(b)(3)(i)(C) Option C – ERP frequencies above 300 kHz but at distances $R > \lambda/2\pi$ can be exempted as follows:

TABLE B.1—THRESHOLDS FOR SINGLE RF SOURCES
SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

RF Source Frequency			Minimum Distance			Threshold ERP
f_L MHz		f_H MHz	$\lambda_L / 2\pi$		$\lambda_H / 2\pi$	W
0.3	–	1.34	159 m	–	35.6 m	$1,920 R^2$
1.34	–	30	35.6 m	–	1.6 m	$3,450 R^2/f^2$
30	–	300	1.6 m	–	159 mm	$3.83 R^2$
300	–	1,500	159 mm	–	31.8 mm	$0.0128 R^2 f^2$
1,500	–	100,000	31.8 mm	–	0.5 mm	$19.2 R^2$
Subscripts L and H are low and high; λ is wavelength. From § 1.1307(b)(3)(i)(C), modified by adding Minimum Distance columns.						

Calculation based on external document "MPE Main-unit" provided by customer.

Frequency [MHz]	$\lambda/2\pi$ [m]	R [m]	$R \geq \lambda/2\pi$ fulfilled	Threshold ERP [W]	Cond. PWR incl. Tolerance [dBm]	Maximum Antenna Gain [dBi]	EIRP [dBm]	ERP [dBm]	ERP [W]	MPE Exemption fulfilled
902.5	0.053	0.200	yes	0.462	10	2.1	12.1	9.95	0.010	yes
906	0.053	0.200	yes	0.464	10	2.1	12.1	9.95	0.010	yes
909.5	0.052	0.200	yes	0.466	10	2.1	12.1	9.95	0.010	yes

Conclusion: MPE-Based Exemption fulfilled

Dipl.-Ing. Ninovic Perez

B.Eng. Martin Nunier

Version	Applied changes	Date of release
--	Initial release	2022-Sep-27