

Manufacturer: IDS GeoRadar s.r.l.

Name: Oscar Frau

Model: IBIS-KU-ETH3

Title: Project Handler

FCC ID: UFW-IBIS-KU-ETH3

Signature:



MPE limits (§1.1310)

RF Source frequency range (MHz)	Frequency	Duty Cycle	Output Power ⁴	Antenna Gain ⁵	EIRP ¹	EIRP	Distance ⁸	Power Density ² (PD)	Power Density Limit ³	Margin	2.1091 EIRP Limit	2.1091 EIRP Margin
	MHz	%	dBm	dBi	dBm	mW	cm	mW/cm ²	mW/cm ²	dB	mW	dB
1,500 - 100,000	17100	100	20,8	13,5	34,3	2692	30	0,2380	1	6,23	2834	0,2

¹EIRP = (Power dBm + Antenna Gain dBi) + 10 x Log (Duty Cycle % / 100)

²PD = EIRP / (4πx²D²)

³CFR 47 Part 1, §1.1310(e), table 1

⁴See test report n. REPO33557, p. 12. This is the higher conductor RF power measured at the antenna ports.

Simultaneous transmission is not allowed as the two transmitters operate in time division multiplexing mode.

⁵The Operational description in p.7 reports the factory calibration table for RF output power Vs. antenna gains; the reported antenna gain is relevant to the type IBIS-ANT7-H50V31, the most used. The other antenna types listed in the Operational description, and relevant factory calibrations, ensure that product conformity is maintained.

47 CFR 1.1307(b)(3) - Determination of exemption

47 CFR 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency range (MHz)	Frequency	R ⁸	λ	λ/2π	R/(λ/2π) ⁶	Threshold ERP ⁷	Threshold EIRP	Threshold EIRP	EIRP	Margin
	MHz	m	m	m		W	W	mW	mW	dB
1,500 - 100,000	17100	0,3	0,0175	0,00279	107,44	1,728	2,834	2834	2692	0,2

⁶R shall be $\geq \lambda/2\pi$

⁷Threshold ERP = 19.2R²

⁸distance reported in the User manual