

Cover Letter – Declaration of Similarity of radar modules of iLDRG5 and iSDRG5

IC Company Number 21407

FCC Company Number 2AJRS

TO WHOM IT MAY CONCERN

Our iSDR-G5 2D radar family covers 8 devices, that are electronically identical:

<u>IC</u>	<u>FCC ID</u>	<u>list of HVIN</u>	
21407-ISDRG5	2AJRSISDRG5	iSDR-M-G5-DN135	iSDR-M-G5-DN135V
		iSDR-H-G5-DN190	iSDR-H-G5-DN190V
		iSDR-M-G5-DN135F	iSDR-M-G5-DN135VF
		iSDR-H-G5-DN190F	iSDR-H-G5-DN190VF
21407-ILDRG5	2AJRSILDRG5	iLDR-M-G5-DN050	iLDR-M-G5-DN080
		iLDR-M-G5-DN100	

The model number pattern for ISDRG5 is iSDR-x-DNyyyyzz with

- x indicating the main product variant, which is currently only "M" and "H"
- yyy indicating the mounted antenna type, which is currently either "135" or "190"
- zz a mirror type variation with a different gain in case it is relevant, currently it can be unused or "V". Additionally, a "F" might be appended for a fixed mirror, with disabled mirror motor. This Results in "F" or "VF"

The model number pattern for ILDRG5 is iLDR-x-DNyyyy with

- x indicating the main product variant, which is currently only "M"
- yyy indicating the mounted antenna type, which is currently either "050", "080" or "100". (it might be sometimes written in marketing material without the leading "0")

During assessment the radar HF source and its frequency stability has been tested.

Hereby we declare that the internal PCBs

- Interface PCB
- Power PCB
- Baseboard PCB
- Radar Frontend PCB

are the same in any of the mentioned devices. All devices have the same power supply and frequency generation components.

The baseboard in all devices is populated with an extension connector to which only in the ISDRG5 family a motor control PCB for the rotating parabolic mirror is connected. The motor module with it's embedded motor control PCB is the only electronic extension.

As a result, frequency stability over environmental temperature and input voltage variation is equal.

If you have any questions, please feel free to contact me at the address shown above.

Sincerely,

A handwritten signature in blue ink, appearing to read "M. Rabel".

Dr.-Ing. Matthias Rabel
(VP R&D Embedded Hardware and Sensors)