



2025-11-26

REQUEST FOR CONFIDENTIALITY

Re: ImpulseRadar Sweden AB, application for Ground Penetrating Radar
FCC ID: 2ALZQ-PPR3D IC:24094-PPR3D

Dear Sir/Madam,

ImpulseRadar Sweden AB (hereafter 'ImpulseRadar') herein submits an application for Equipment Authorization for certification of a ground penetrating radar system under the FCC Rules Part.

Long Term (Permanent) Confidentiality

ImpulseRadar requests, pursuant to sections 0.459 and 0.457(d) of the FCC rules, long-term (permanent) confidentiality for portions of the material contained in this application, such that the identified material will be withheld from public inspections following the grant of this authorization. This material, indicated by request for confidentiality for the items during the electronic submission process, includes all material holding information that would be confidential, had this application not been submitted and further identified below:

Exhibit Type:	Description:
Block Diagrams	<i>Circuit topology and functional system layout</i>
Schematics	<i>Detailed component-level circuitry</i>
Operational Description	<i>Theory of operation and signal processing explanations</i>
Internal Photos	<i>Images revealing proprietary internal architecture</i>
Parts List / BOM	<i>Component-level material specification</i>

Specifically, this material contains information on circuit function and systems design that could benefit competitors. This material contains trade secrets and confidential information that ImpulseRadar does not customarily release to the public, and which is not otherwise available to the public.

ImpulseRadar has invested substantial effort in developing this product, and it is among the first of its kind in the industry. Having the information mentioned above readily available to competitors would, in a short time, render the advantages this product has in the marketplace obsolete. Failing to protect the design details will result in financial hardship.

We also refer to the following applications for which the same material has been granted confidentiality:

FCC ID:		
QLA250MHZ EA586775	QLA1200MHZ EA935931	QLA2500MHZ EA639244
QLA80MHzHDR	QLAWIDERANGE	QLA1600MHZ EA923409
2ALZQ-CO4080	2ALZQ-CO730	2ALZQ-CO1760
2ALZQ-PLT600		

A rationale justifying confidentiality is provided as follows.



Rationale For Confidentiality Request:

The product line to which this device belongs is marketed worldwide to specialists in utility locating/mapping and geophysical surveying. The distribution is managed through our own distribution network and our own sales offices. The marketplace is a typical niche market with 8-12 players on the international stage, the largest of which employs more than 100 people. Given the small size and limited resources of the players, it has become industry standard to safeguard trade secrets and technical know-how by making it hard to open and inspect instruments, as well as by not revealing the precise composition of the subsystems within each product in user manuals and other documentation. Larger corporations typically protect their intellectual property through patents and/or other legal means, but this is not a common practice in our industry. It's simply too expensive for companies in this niche to defend such rights internationally.

The price of a system containing the referenced product for end clients is between \$30,000 and \$40,000 USD, depending on the specific configuration of software and mechanical accessories. Service and repair are only available at our headquarters in Sweden. Material and information necessary for repair (such as schematics, blueprints, and component lists) are never given out to distributors or end clients; they are held and maintained internally only.

To view the inside of the product to which the application refers, one must drill out or remove the screws that attach the top plastic lid to the bottom of the unit, as these are one-way screws and glued in place, making it impossible to open. Further on, one must drill out rivets, keeping the internal shields together and detaching connectors in a specific order to avoid causing irreparable damage. Before final assembly, electromagnetic absorbers are glued to the metal shields. These absorbers cannot be removed without causing permanent damage and must be replaced with new ones upon reassembly. Any person outside our organization will not know precisely what material to use and will consequently not be able to reassemble the unit to its original design. All warranties are, of course, invalid if we receive units that have been tampered with.

It follows from the price range, the distribution/repair network and the niche type of market, that the application does not refer to a consumer product, furthermore we have explained that the unit is sealed and that specific measures have been taken to discourage customers from opening the units and that should someone anyway try, the likelihood is very high that the unit is damaged beyond repair. The minimum cost of obtaining the information for which we seek confidentiality is, hence, the retail price of the unit. This cost may seem small, but in a marketplace with only small companies, it is still considerable; furthermore, it is well above the cost of downloading from the internet. Given that the internal photos reveal significant, expensive, and proprietary engineering, and that we may suffer competitive harm, we believe our request is well-supported.

The application refers to a new and novel product, the result of several years' effort by our engineering group. In this development, we have finely tuned the product to match the applications it's built for. A knowledgeable competitor will gain a significant advantage in their efforts by reviewing the block schematic and operational description. One may not be able to create a unit from these documents, but they will receive very specific hints on where to start and which types of components to search for. This may save them considerable time at our expense if the material is made publicly available.

The same holds for the schematics and component lists. However, with this additional information, we would also indirectly provide guidance to knowledgeable electronic engineers on how to increase



the unit's output power beyond the limits permitted by the FCC emission masks. It may therefore be counterproductive, from the FCC's point of view, to publish this kind of information.

In addition to the harm we may suffer from competitors obtaining technical knowledge about our product line, we may also suffer from competitors estimating our gross margins. By reviewing internal photos, block schematics, functional descriptions, electronic schematics, and component lists, a competitor may be able to estimate the manufacturing costs of the electronic boards and the man-hours required to assemble the product. They may also get a good hint at what our future plans look like. We consider this kind of information to be a trade secret, and even if competitors would not obtain precise values, they would be able to estimate these numbers to a much higher degree of precision had the information not been public.

I have explained why we are at risk of suffering competitive harm, how the material we seek confidentiality for is protected and withheld from our end-clients and that it's not publicly available from other sources. Furthermore, I have pointed out that it may not be in the public's (FCC's) interest to publish information which can be used to violate emission masks.

Formal, legal basis of our request may be found in the following two references:

- 1) McDonnell Douglas Corp. v. NASA, 180 F.3d 303, 304-05, (D.C. Cir. 1999), quoting Critical Mass Energy Project v. NRC, 975 F.2d 871, 879 (D.C. Cir. 1992)(en banc). See also National Parks & Conservation Ass'n v. Morton, 498 F.2d 765, 770(D.C. Cir. 1974).
- 2) Worthington Compressor. Inc., v. Costle, 662 F.2d 45, 51 (D.C. Cir 1981), citing National Parks & Conservation Ass'n v. Morton, 498 F.2d 765, 770 (D.C. Cir. 1974).

Short Term Confidentiality

ImpulseRadar also requests short-term confidentiality for the following exhibits to be withheld from public view until the device is marketed, or for a period of 90 days from the date of the Grant of Equipment, whichever is less. If the device is marketed within 90 days of the Grant Date, ImpulseRadar will notify the ACB per FCC KDB 762920 D01 Confidentiality Request Procedures.

Exhibit Type:	Description:
External Photos	<i>Product images visible to end users</i>
Test Setup Photos	<i>Photographs showing compliance measurement configuration</i>
User Manual(s)	<i>Intended for public release only after market launch</i>

Yours faithfully,

Brian Wright
Managing Director, ImpulseRadar Sweden AB.

