



VEGAPULS 6X



1 European Union



Hereby, VEGA Grieshaber KG declares that the radio equipment type VEGAPULS 6X is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:
www.vega.com

This device has been approved for closed containers (TLPR) and open air environments (LPR). In the countries of the CEPT the use is permitted, provided that the corresponding rules of the radio regulation ECC Recommendation 70-03 have been implemented.

Level Probing Radar Equipment (LPR) and Tank Level Probing Radar Equipment (TLPR)
(max. +34 dBm EIRP):

- plastic horn antenna
- integrated horn antenna system (thread 1 1/2")
- lens antenna
- horn antenna ($\geq \varnothing 40$ mm)

Tank Level Probing Radar Equipment (TLPR) only
(max. +39 dBm EIRP):

- flange with plastic plating
- integrated horn antenna system (thread 1", 3/4")
- horn antenna ($\varnothing 21$ mm, $\varnothing 26$ mm)
- hygienic fitting

For the receiver test, which covers the influence of an interfering signal on the device, the performance criterion has at least the following performance level according to ETSI TS 103 361 [6]:

- Performance criterion: Variation of the measured value during distance measurement under interference conditions
- Performance level: $\Delta d \leq \pm 50$ mm

For operation inside of closed vessels, points a to f in annex E of EN 302372 must be fulfilled. For operation outside of closed vessels, the following conditions must be fulfilled:

- The instrument must be stationary mounted and the antenna directed vertically downward
- The mounting location must be at least 4 km away from radio astronomy stations (a list can be found in the operating instructions), unless special permission was granted by the responsible national approval authority
- When installed within 4 to 40 km of a radio astronomy station, the instrument must not be mounted higher than 15 m above the ground

2 USA

FCC ID: O6QPS6XW

FCC § 15.19 Labelling requirements

This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

FCC § 15.21 Information to user

"Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment."

FCC §15.105 Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

FCC §15.256 Statement

This device is approved for unrestricted use only inside closed, stationary vessels made of metal, reinforced fiberglass or concrete. For operation outside of closed vessels, the following conditions must be fulfilled:

- The equipment shall be professionally installed and maintained to ensure a vertically downward orientation of the transmit antenna and the installation shall be only at fixed locations; installation is not required at the time of certification. Hand-held and residential consumer applications are not permitted

The LPR device shall not operate while being moved or while inside a moving container

- Hand-held applications are prohibited
- Marketing to residential consumers is prohibited

RF Exposure Requirements

To comply with FCC RF exposure compliance requirements, the device must be installed to provide a separation distance of at least 28 cm from all persons.

3 Canada

IC: 3892A-PS6XW

This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Canada Class B statement

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

RF Exposure Requirements

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Operating conditions

This device has been approved for both closed containers (TLPR) and open air (LPR) with the following limitations:

- Closed containers (TLPR):
For installations utilizing a tilt during installation:
This device is limited to installation in a completely enclosed container made of metal, reinforced fiberglass or concrete to prevent RF emissions, which can otherwise interfere with aeronautical navigation
- Open air environment (LPR):
For operation outside of closed vessels, the following condition must be fulfilled: This device shall be installed and maintained to ensure a vertically downward orientation of the transmit antenna's main beam
- Furthermore, the use of any mechanism that does not allow the main beam of the transmitter to be mounted vertically downward is prohibited
- The installation of the LPR/TLPR device shall be done by trained installers, in strict compliance with the manufacturer's instructions
- The use of this device is on a "no-interference, no-protection" basis. That is, the user shall accept operations of high-powered radar in the same frequency band which may interfere with or damage this device. However, devices found to interfere with primary licensing operations will be required to be removed at the user's expense
- The installer/user of this device shall ensure that it is at least 10 km from the Dominion Astrophysical Radio Observatory (DRAO) near Penticton, British Columbia. The coordinates of the DRAO are latitude 49° 19' 15" N and longitude 119° 37' 12" W. For devices not meeting this 10 km separation (e.g., those in the Okanagan Valley, British Columbia) the installer/user must coordinate with, and obtain the written concurrence of the Director of the DRAO before the equipment can be installed or operated. The Director of the DRAO may be contacted at 250-497-2300 (tel.) or 250-497-2355 (fax). (Alternatively, the Manager, Regulatory Standards, Industry Canada, may be contacted.

Cet appareil est homologué pour une utilisation dans les cuves fermées (TLPR) et les environnements ouverts (LPR) avec les restrictions suivantes:

- Cuves fermées (TLPR):
Pour les installations impliquant une inclinaison lors de l'installation : cet appareil ne doit être installé que dans une cuve totalement fermée en métal ou en béton, pour empêcher les émissions RF susceptibles d'interférer avec la navigation aéronautique
- Environnement ouvert (LPR):
Pour l'utilisation hors des cuves fermées, la condition suivante doit être remplie : L'appareil doit être installé et entretenu de manière à garantir une orientation verticale vers le bas du faisceau principal de l'antenne émettrice. De plus, l'utilisation de tout mécanisme ne permettant pas l'orientation verticale vers le bas du faisceau principal de l'émetteur est interdite.
- L'installation d'un dispositif LPR ou TLPR doit être effectuée par des installateurs qualifiés, en pleine conformité avec les instructions du fabricant. Ce dispositif ne peut être exploité qu'en régime de non-brouillage et de non-protection, c'est-à-dire que l'utilisateur doit accepter que des radars de haute puissance de la même bande de fréquences puissent brouiller ce dispositif ou même l'endommager. D'autre part, les capteurs de niveau qui perturbent une exploitation autorisée par licence de fonctionnement principal doivent être enlevés aux frais de leur utilisateur.

La personne qui installe/utilise ce capteur de niveau doit s'assurer qu'il se trouve à au moins 10 km de l'Observatoire fédéral de radioastronomie (OFR) de Penticton en Colombie-Britannique. Les coordonnées de l'OFR sont : latitude N 49° 19' 15", longitude O 119° 37' 12". La personne qui installe/utilise un dispositif ne pouvant respecter cette distance de 10 km (p. ex. dans la vallée de l'Okanagan [Colombie-Britannique]) doit se concerter avec le directeur de l'OFR afin d'obtenir de sa part une autorisation écrite avant que l'équipement ne puisse être installé ou mis en marche. Le directeur de l'OFR peut être contacté au 250-497-2300 (tél.) ou au 250-497-2355 (fax). (Le Directeur des Normes réglementaires d'Industrie Canada peut également être contacté).

4 New Zealand

R-NZ

Operating conditions

The points a to f in annex E of EN 302372 must be fulfilled.

a) TLPR are required to be installed at a permanent fixed position at a closed (not open) metallic tank or

reinforced concrete tank, or similar enclosure structure made of comparable attenuating material; b) flanges and attachments of the TLPR equipment shall provide the necessary microwave sealing by design; c) sight glasses shall be coated with a microwave proof coating when necessary (i.e. electrically conductive coating); d) manholes or connection flanges at the tank shall be closed to ensure a low-level leakage of the signal into the air outside the tank; e) whenever possible, mounting of the TLPR equipment shall be on top of the tank structure with the orientation of the antenna to point in a downward direction; f) installation and maintenance of the TLPR equipment shall be performed by professionally trained individuals only

5 Australia



6 South Korea



R-R-VGG-VEGAPULS6X

“본 무선기기는 일체형 또는 본체 전용의 안테나를 사용하여 연직하향으로 고정 설치되어야 하며, 전파천문 안테나로부터 반경 2 km 범위 이내에 설치하고자 하는 경우에는 천문대와 사전 합의하여야 함“

This wireless device shall be fixed and installed vertically and downward using an integrated or body-only antenna, and if it is intended to be installed within a radius of 2 km from the radio astronomical antenna, it shall be agreed in advance with the observatory.

7 Thailand

This device is approved for unrestricted use only inside closed, stationary vessels made of metal, reinforced fiberglass or concrete

8 Brazil

The units sold in Brazil are strictly intended to be operated at 77-81 GHz. The user of the device is responsible for selecting the operating mode for Brazil. The user is being warned in the product manual that any other frequency selected out of this range constitutes a violation of the regulations of the radio approvals of Brazil.

9 Japan



003-230198
003-230195
003-230194
003-230196
003-230197

10 United Kingdom



UK: Please see document 66190 or 66442

11 Malaysia



HIDF20000137

12 Serbia



13 South Africa



TA-2022/1455

14 Ukraine*



UA.TR.109.R.0105-22, UA.TR.109.R.0105-24
VEGA Grieshaber KG заявляет, что это тип радиоустройства: Радарный датчик для измерения уровня. Модель: VEGAPULS 6X, соответствует Техническим Правилам радиосвязи, пожалуйста, обратите внимание на декларацию о доступности на сайте и одновременно на адрес VEGA Grieshaber KG: <https://www.vega.com>

15 Taiwan

CCAQ22LP0410T2



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16 Morocco

AGRÉÉ PAR L'ANRT MAROC

Numéro d'agrément: MR00035637ANRT2022

Date d'agrément: 05/12/2022