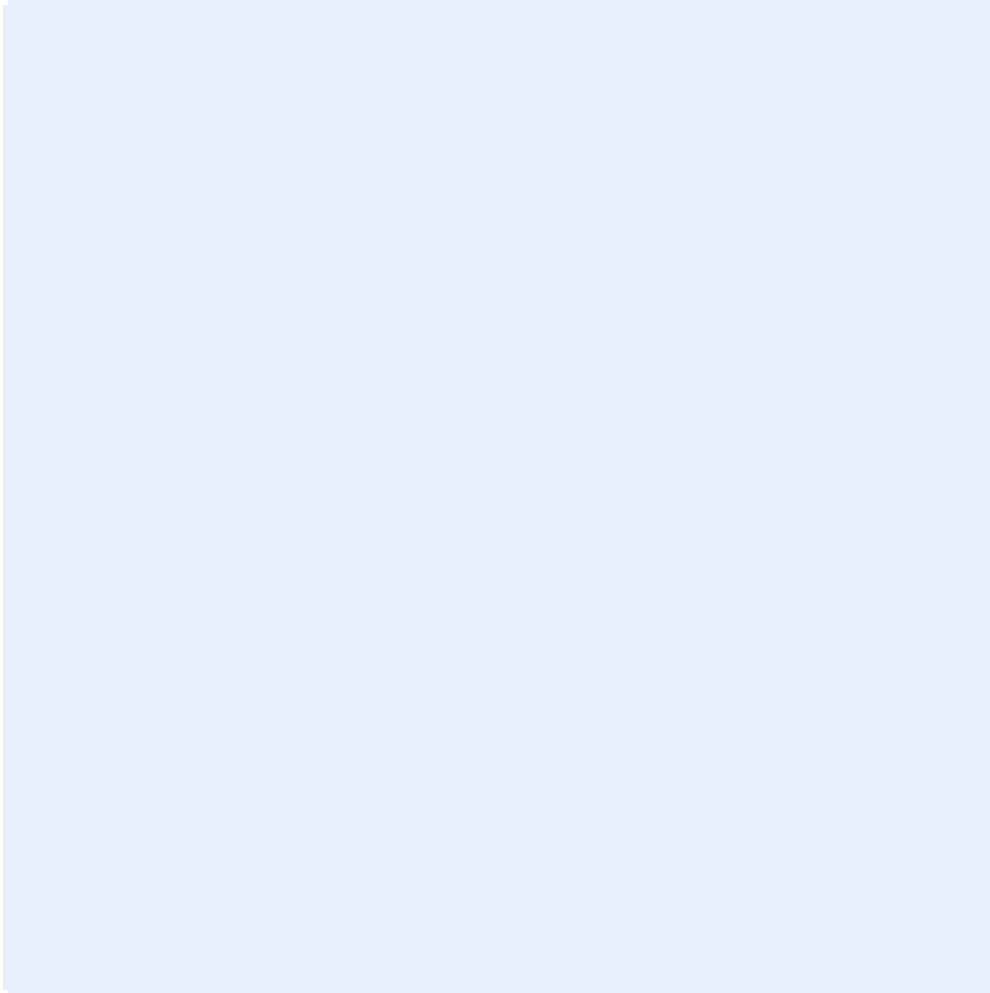


Rosemount 1208A™ Product Certifications



Revision: 0.8

European directive and UK regulation information

A copy of the EU & UKCA Declaration of Conformity can be found at the end of this document. The most recent revision of the EU & UKCA Declaration of Conformity can be found at [Emerson.com/Rosemount](https://www.emerson.com/Rosemount).

Ordinary location certification

As standard, the transmitter has been examined and tested to determine that the design meets the basic electrical, mechanical, and fire protection requirements by a nationally recognized test laboratory (NRTL) as accredited by the Federal Occupational Safety and Health Administration (OSHA).

Certificate: FM22NUS0010, FM22NCA0007

Standards: CAN/CSA-C22.2 No. 61010-1-12, UL Std. No. 61010-1

The device may only be powered by a power supply unit with a limited energy electric circuit max. 30 Vdc output in accordance with CAN/CSA-C22.2 No. 61010-1-12 / UL Std. No. 61010-1 (3rd Edition) chapter 6.3.1/6.3.2 and 9.4 or class 2 according to CSA 223/UL 1310.

Specific conditions of use:

1. The Model 1208 Transmitters shall not be used where UV light or radiation may impinge on the enclosure.
2. Upon installation, a current limiting device in accordance with the requirements of 61010-1 shall be installed to ensure the maximum short circuit current of the supply cannot exceed 4.28A.
3. The installer shall use the power connector Part Number EVC018 manufactured by IFM to maintain the Enclosure Type 4X and 6P ratings, or is responsible to ensure the chosen female power connector complies with Enclosure Type 4X and 6P ratings when mated with the male connector part number 7000006-824 by Binder.

Environmental conditions

Table: Environmental conditions (Ordinary Location and Low Voltage Directive (LVD))

Type	Description
Location	Indoor or outdoor use
Maximum altitude	6562 ft. (2000 m)
Operating pressure	-14.5 to 43.5 psig (-1 to +3 Bar)
Ambient temperature	-40 to 176 ° F (-40 to 80° C)
Installation category	DC supplied
Electrical supply	18-30 Vdc, 3.6 W
Mains supply voltage fluctuations	Safe at 18-30 Vdc $\pm$ 10%
Pollution degree	2

Telecommunication compliance

LPR (Level Probing Radar) equipment are devices for measurement of level in the open air or in a closed space.

TLPR (Tank Level Probing Radar) equipment are devices for measurement of level in a closed space only (i.e metallic, concrete or reinforced fiberglass tanks, or similar enclosure structures made of comparable attenuating material).

Hardware Version Identification Number (HVIN) is 1208L1 or 1208LB1 (without or with Bluetooth).

Measurement principle

Frequency Modulated Continuous Wave (FMCW), 80 GHz

Maximum output power

3 dBm (2 mW)

Frequency range

77 to 81 GHz

[Placeholder Bluetooth info]

FCC

Note: 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 ID K8C1208L (for LPR/TLPR without Bluetooth)

FCC ID K8C1208LB (for LPR/TLPR with Bluetooth)

[Placeholder Bluetooth info]

IC

This device complies with Industry Canada's licence-exempt RSS standard. Operation is subject to the following conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.
3. The installation of the LPR/TLPR device shall be done by trained installers in strict compliance with the manufacturer's instructions.
4. 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.
5. 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.)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage.
2. l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
3. L'installation d'un dispositif LPR/TLPR doit être effectuée par des installateurs qualifiés, en pleine conformité avec les instructions du fabricant.
4. 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.
5. 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).

Certificate: 2827A-1208L (for LPR/TLPR without Bluetooth)
2827A-1208LB (for LPR/TLPR with Bluetooth)

[Placeholder Bluetooth info]

Radio Equipment Directive (RED) 2014/53/EU and Radio Equipment Regulations S.I. 2017/1206

Open air installations

Rosemount 1208A complies with ETSI EN 302729 and EN 62311.

Install at a separation distance of >4 km from Radio Astronomy sites, unless a special authorization has been provided by the responsible National regulatory authority (a list of Radio Astronomy sites may be found at www.craf.eu).

Between 4 km to 40 km around any Radio Astronomy site the LPR antenna height shall not exceed 15 m height above ground.

Closed tanks

Rosemount 1208A complies with ETSI EN 302 372 and EN62311.

The device must be installed in closed tanks (metal, reinforced concrete tanks or similar enclosure structures made of comparable attenuating material). Install according to requirements in ETSI EN 302 372 (Annex E).

Performance under the influence of an interferer signal

For the receiver test that covers the influence of an interferer signal to the device, the performance criterion has at least the following level of performance according to ETSI TS 103 361 [6].

- Performance criterion: measurement value variation Δd over time during a distance measurement
- Level of performance: $\Delta d \leq \pm 2 \text{ mm}$

Hygienic Approvals (pending)

The process wetted components comply with:

FDA21 CFR110, subpart C

EC 1935/2004

TSE/BSE Free

Instructions for hygienic installations

To conform with applicable hygienic standards and food and beverage legislation and regulations, the Rosemount 1208A must be:

- Installed in a closed tank.

It is the responsibility of the user to ensure that:

- The materials listed in **Materials of construction** are suitable for the media and cleaning/sanitizing processes.
- The installation of the transmitter is drainable and cleanable.
- The joint/clamping between the transmitter and the nozzle is compatible with the tank pressure and media.
- The product contact surfaces are not scratched.

Materials of construction

The hygienic approvals and certificates of the transmitter rely upon the following materials used in its construction:

Product Contact Surfaces:

Item	Material	Compliant with
PVDF	PVDF Kynar 720	FDA 21 CFR 177.1550 EG regulations 1935/2004 GMP 2023/2006 REACH 1907/2006

		EC 10/2011 TSE/BSE Free USP<87> USP<88> Class VI
Grey EMA MB	EMA 3C110	FDA 21 CFR 177.1550 EG regulations 1935/2004, GMP 2023/2006 EU10/2011 EG Regulations 282/2008, 2015/863 RoHS 2011/65/EU RoHS 2015/863
EPDM		

Water Approvals

[Placeholder water approvals info]