



# EMERSON 1208A Level and Flow Transmitter User Manual

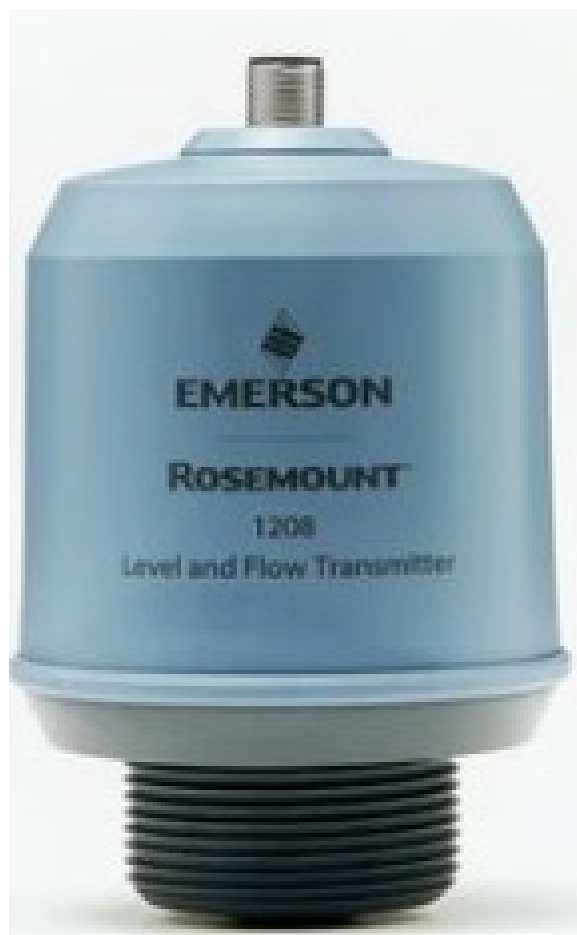
[Home](#) » [Emerson](#) » EMERSON 1208A Level and Flow Transmitter User Manual 

## Contents

- 1 EMERSON 1208A Level and Flow Transmitter
- 2 European directive and UK regulation information
- 3 Ordinary location certification
- 4 Environmental conditions
- 5 Telecommunication compliance
- 6 FCC
- 7 Radio Equipment Directive
- 8 Hygienic Approvals (pending)
- 9 Documents / Resources
- 10 Related Posts

# EMERSON

**EMERSON 1208A Level and Flow Transmitter**



## 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/UIL1310.

## 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 installers 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 En closure Type 4Xand 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 ± 10%
Pollution degree	2

**Telecommunication compliance**

LPR (Level Probing Radar) equipment are devices for the 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 en ergy and, if not in stalled 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 of 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 anten na.
- Increase the separation between the equipment and receiver.
- Connect the equipment in to an outlet on a circuit d ifferent 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)

This device complies with Industry Canada's license-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 o operations of high-powered rad arin the same frequency band which may interfere with or damages 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 th is 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 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.)

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

## **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 ata separation distance of >4 km from Radio Astronomy sites, unless special authorization has been provided by the responsible National regulatory authority (a list of Radio Astronomy sites may be found at [www.craf.eu](http://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 Ad overtime during a distance measurement
- Level of performance: Ad KE2 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 confirm 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]

### Documents / Resources

 <small>Emerson 1208A Product Certification</small>	<p><b><a href="#">EMERSON 1208A Level and Flow Transmitter</a></b> [pdf] User Manual 1208LB, K8C1208LB, 1208A, Level and Flow Transmitter, Flow Transmitter, Transmitter</p>
---	--