evo 1610 Radar Level Gauge

Product Description

The evo 1610 Radar Level Gauge is the latest device in L&J engineering's evolution series of radar level gauges. Featuring 0.5mm accuracy certified by NMi of the Netherlands who is the leading independent specialist for testing, certification and training in the field of metrology, the evo 1610 meets or excels the requirements of OIML R85 and is on the bleeding edge of radar level gauging technology.

The evo 1 610 comes in two variants. One of which is a low-power native intrinsically safe Foundation Fieldbus (FF) radar level gauge. Any certified Foundation Fieldbus handheld calibrator can be used to program and calibrate the device using readily available Foundation Fieldbus Device Descriptors (DD's).
The other variant of the evo 1610 features a local graphical LCD display, supports a wide range of industry standard protocols, including L&J Tankway and Modbus on RS-485, and can be calibrated via infrared with the MCG 2150 Remote Calibrator.

Typical Applications

- Liquid petroleum and related products: crude oil (and crude oil which may contain sediment and/or water), liquid hydrocarbons, liquefied petroleum gas (LPG), liquid fuel, lubricants, industrial oils, etc.
- Alcohol: pure ethanol (ethyl alcohol) and mixtures of only ethanol and water; chemical products in liquid state.
- "Special water", distilled water, deionized water, demineralized water and all water.

Features

- 0-85 feet (26m) Measuring Range
- +/- .5mm Accuracy
- 10 GHz FMCW Technology
- Multiple Communications Protocols
- OIML R85 Certification

Specifications:

Measuring Range:
0-85 feet (26m)

Accuracy:
+/- .5 mm

Resolution:
0.1 mm (0.004')

Repeatability:
0.2 mm (0.008')

Radar Frequency:
10 GHz

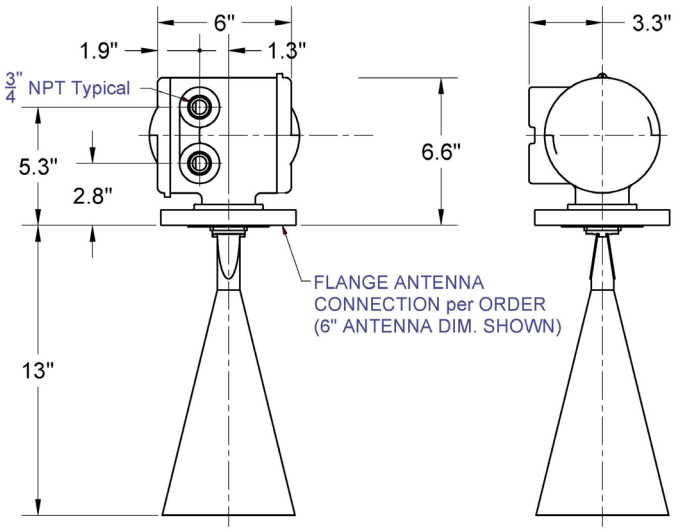
Operating Temperature:
-40° F to 160° F (-40°C to +70° C)

Power Consumption:
30 mA

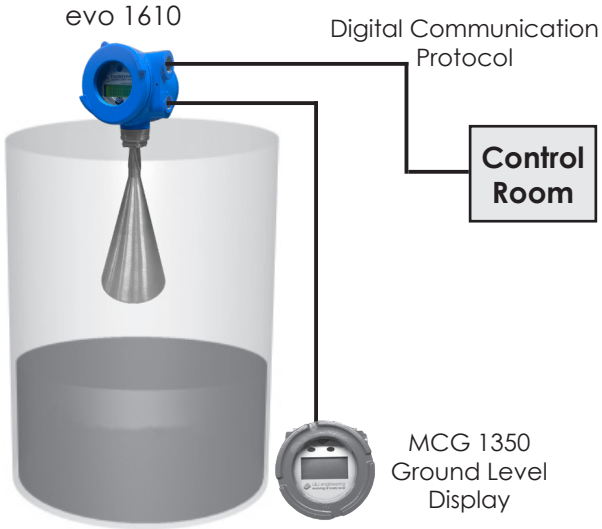
Process Pressure:
Up to 150 PSI

Weight:
Approximately 8 lbs.

Dimensions



Typical System Layout



All designs subject to change. Certified dimensions and specifications available upon request.

evo 1610 Radar Level Gauge Ordering Guide

evo 1610 Radar Level Gauge

Model Number Selection:

The model number will consist of a base number **1610** followed by 9 digits. These digits will represent 10 sets of option tables:

evo 1610 - A - B - C - D - E - F - G - H - I

A - Approval	
1	FM Explosion Proof
2	CSA Explosion Proof
3	ATEX Explosion Proof
4	IECEX Explosion Proof

B - Housing Material	
1	Aluminum

C - Antenna Options	
0	No Antenna
1	4" Conical Horn Antenna 316SS
2	6" Conical Horn Antenna 316SS
3	8" Conical Horn Antenna 316SS
4	15" Parabolic Antenna
5	4" Stilling Well Antenna 316SS
6	6" Stilling Well Antenna 316SS
7	8" Stilling Well Antenna 316SS

D - Process Connection	
0	No Flange, 2" NPT Connection
3	4" 150# RF ANSI 316SS
4	6" 150# RF ANSI 316SS
5	8" 150# RF ANSI 316SS

E - Digital Communication Protocol	
1	Foundation Fieldbus
2	L&J Tankway
3	GPE 31422, 31423
4	Varec 4-Wire (1800, 1900)
5	Modbus on L&J Tankway
6	Modbus on RS-485 (2-Wire)
7	HART
8	WirelessHART

F - Power	
1	9-32 VDC*
2	48 VDC

G - Display	
0	No Display*
1	Local LCD Display

H - OMIL	
0	No OMIL
1	OIML R85 Approval*

I - Ground Level Display Compatibility	
0	No Ground Level Display*
1	Ground Level Display Compatibility**

*Must choose table E option 1
** Requires MCG 1350M Ground level Display