

# Radar Tank Gauging

## Application Data Sheet



In order to specify the correct instrument for your application please complete all fields for each tank.

**Completed By:**

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**Company:**

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**Tel:**

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**E-mail:**

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**Date:**

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**Notes:**

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**Application**

What product is stored in the tank?

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Dielectric Constant:\_\_\_\_\_

What accuracy is required?

±0.5 mm  ±1 mm  ±2 mm

±6 mm

Custody Transfer  Yes  No

What current tank gauging technology is used on this tank?

Radar  Servo  Mechanical

HTG  Hybrid  Magnetostrictive

None  Other:\_\_\_\_\_

Temperature units  °C  °F

Temperature min.:\_\_\_\_\_

Temperature max.:\_\_\_\_\_

Vapor pressure units  PSIG  BAR

Vapor pressure min.:\_\_\_\_\_

Vapor pressure max.:\_\_\_\_\_

Is there evidence of liquid turbulence or foaming on the product surface?

None  Turbulence  Foam

What area classification is required?

FM  ATEX  IEC Ex

CSA

Other \_\_\_\_\_

Non-hazardous area

**Tank**

What type of tank will the instrument be installed on?

Cone/Fixed  Sphere

Internal or  External floating roof

Horizontal or  Vertical cylinder

Tank ID#:\_\_\_\_\_

Nozzle height (N):\_\_\_\_\_

Maximum fill level (F):\_\_\_\_\_

Tank shell height (T):\_\_\_\_\_

Tank diameter:\_\_\_\_\_

**Mounting**

What is the type and size of the nozzle connection?

Flange size:\_\_\_\_\_

Flange class:\_\_\_\_\_

ASME  Threaded NPT; Size \_\_\_\_\_

DIN

Tri-clamp  Other:\_\_\_\_\_

Distance from:

- flange to tank entry (H):\_\_\_\_\_

- tank wall (W):\_\_\_\_\_

Is the flange parallel to the product surface?  Yes  No

Are there any known extrusions or obstacles below the location of the mounting flange/nozzle?  Yes  No

If yes, please provide details:

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Are there any inlets that will pour product into the tank in the vicinity of the mounting location?  Yes  No

If yes, please provide details:

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Are there other provisions for manually hand dipping the tank?

Yes  No

**Stilling Well**

Will the instrument be mounted on an existing stilling well?  Yes  No

Stilling well nominal diameter:\_\_\_\_\_

Pipe size and schedule/wall thickness used:\_\_\_\_\_

Constant Diameter?  Yes  No

If no give details:\_\_\_\_\_

Slots/Hole width:\_\_\_\_\_

**Communications Output**

What primary output protocol is required?

Profibus  Foundation Fieldbus

4-20 mA HART Ex d/XP

4-20 mA HART Ex i/IS

Mark/Space

RS-485 MODBUS  Enraf GPU Bi-Phase Mark

TRL/2  L&J Tankway  V1

WM550

Other:\_\_\_\_\_

What secondary output protocol is required?

4-20mA HART Ex d/XP

4-20mA HART Ex i/IS

Relay outputs  2  4  6

RS-485 MODBUS

Ex d/XP 1x 4-20mA HART

Ex d/XP 2x 4-20mA HART

Ex i/IS 1x 4-20mA HART

Ex i/IS 2x 4-20mA HART

Mark/Space

WM550  V1  TRL/2

Enraf GPU Bi-Phase Mark

L&J Tankway

Other:\_\_\_\_\_

**Power Source**

What type and range of power source is available at the tank?  AC  DC

Power range (Volts):\_\_\_\_\_

Location:  Tank top  Tank side

**Tank Side Operation and Display**

What functionality is required at the tank side?

Display  Configuration  Control

Inputs  Outputs  Relays  None

Radar Remote Display

Other:\_\_\_\_\_

[www.varec.com](http://www.varec.com)

**Additional Approvals & Options**

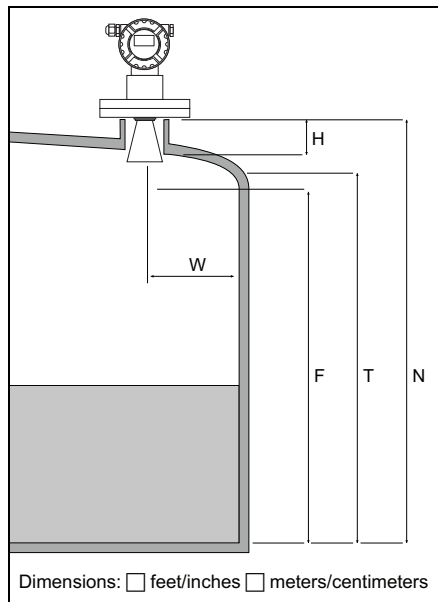
- SIL
- CRN
- Marine Certificate

Type -----

- Overvoltage protection
- Gas-tight feed through
- Air purge
- Antenna extension
- Weather protection cover
- 3-Point Calibration Certificate
- 5-Point Calibration Certificate
- 10-Point Calibration Certificate, Standard Version
- 10-Point Calibration Certificate, Maximum Performance
- NMI factory Custody Transfer Certificate
- NMI factory Custody Transfer Certificate, Max Performance
- PTB Factory Custody Transfer Certificate
- PTB Factory Custody Transfer, Maximum Performance
- Test/Material Certificate

Type(s) -----

- DeviceCare USB flash drive
- Other -----



**Temperature Measurement**

Do you require temperature measurement?

- None  Spot  Average

If Average, please complete the temperature application data sheet.

**Other Measurements**

Do you require other measurements?

- None
- Density (Hybrid)