

JOWA Consilium



Introducing Radar

Tank Gauging Systems

www.jowa-consilium.com

Technical specifications

Mode of operation

Measuring principle	FMCW radar level measurement
Frequency	24 to 25 GHz FMCW
Measuring range	0.35 to 50 m (1.15 to 164 ft)

Output

Analog output (HART®)	
• Signal range	Optically isolated 4 to 20 mA
• Load	Max. 600 .
Communication	HART, optional PROFIBUS PA
Digital output	Relay, NC or NO function, max. DC 50 V, max. 200 mA, rating 5 W
PROFIBUS PA protocol	Layer 1 and 2, Class A, Profile 3.0

Performance (Reference conditions)

Accuracy	= 5 mm
Repeatability	= 1 mm
Fail-safe	mA signal programmable as high, low or hold (LOE)

Rated operating conditions

• Amb. temperature for enclosure	-40 to +65 °C (-40 to +149 °F)
• Location	Indoor/outdoor

Medium conditions

Dielectric constant	$\epsilon_r > 1.4$
Process temperature range	-40 to +200 °C (-40 to +392 °F)
Vessel Pressure	Up to 40 bar, (600 psig) (process connection dependent)

Design

Weight Approx.	12.2 kg (26.8 lbs) with 3" 150 psi flange
----------------	---

Materials

• Enclosure	Die-cast aluminum, painted
• Ingress protection	IP67/Type 4X/NEMA 4X, Type 6/NEMA 6

Programming

Handheld communicator	HART
Display (local)	Alphanumeric LCD for readout and entry

Power supply

120 to 230 V AC \pm 15% (50/60 Hz), 6 W (12 VA) or
24 V DC +25/-20%, 6 W (optional)

Certificates and approvals

• Safety	CSAUS/C, CE, FM
• Shipping	• Lloyd's Register of Shipping • ABS
• Radio	Europe (R&TTE, CETECOM), Industry Canada, FCC
• Hazardous areas	ATEX II 1/2 G EEx dem [ia] IIC T6 ATEX II 1/2 G EEx dem IIC T6 CSA/FM Class I, Div. 1, Groups B, C, D; Class II, Div. 1, Groups E, F, G; Class III T6

JOWA Consilium

JOWA Consilium US, Inc.
59 Porter Road Littleton, MA 01460 USA
(+1) 978-486-9800 www.jowa-consilium.com