RADAR LEVEL MEASUREMENT / DATA SHEET

SS401-02
Smart Radar Level Gauge

Non-contact radar level measurement for high-temperature, high-pressure and slightly corrosive liquids.

Overview

- SS401-02 is a non-contact radar level gauge for high-temperature, high-pressure and slightly corrosive liquids.
- A small antenna and concentrated beam improve echo capability while helping to reduce interference from the installation environment.
- The source describes high-frequency radar measurement as having little effect from severe dust, water vapour and atmospheric changes.
- The source-listed configuration provides a 30 m measuring range, 26 GHz operation and a 304 stainless-steel horn antenna.



Range **30 m**	**Accuracy** **±3 mm**	**Frequency** **26 GHz**	**Output** **4-20 mA / HART**
Supply **24 VDC**	**Pressure** **-0.1 to 4 MPa**	**Antenna** **Horn / 304 SS**	**Protection** **IP67**

Key Advantages

- Non-contact measurement with no mechanical wear or direct medium contact.
- Small antenna and concentrated beam improve echo capability and help reduce interference.
- High-frequency measurement is described as having little effect from severe dust and water vapour.

Application Scenarios

- High-temperature and high-pressure liquid level measurement.
- Slightly corrosive liquid measurement.
- Process vessels where non-contact radar measurement is preferred.

Measurement Principle

SS401-02 uses non-contact radar level measurement. The source describes a small antenna and concentrated beam that enhance echo capability and help avoid interference. The source also states that high-frequency radar measurement is little affected by severe dust, water vapour, temperature changes or atmospheric pressure changes.

Technical Specifications

Parameter	Specification	Parameter	Specification
Applicable media	High temperature, high pressure, slightly corrosive liquid	**Measuring range**	30 m
Signal output	4-20 mA / HART; Modbus-485	**Supply voltage**	24 VDC
Signal line specifications	2 Wire / 4 Wire	**Measurement accuracy**	±3 mm

Parameter	Specification	Parameter	Specification
Process temperature	-40 to +80 °C; -40 to +130 °C; -60 to +250 °C	**Process pressure**	-0.1 to 4 MPa
Antenna structure	Horn antenna	**Antenna material**	304 stainless steel
Frequency range	26 GHz	**Protection class**	IP67
Explosion-proof grade	Exib IIC T6 Gb	**Process connection**	Thread / Flange (Optional)
Live display	4-digit LCD liquid crystal display		

Output and Communication

Interface	Source-listed configuration
4-20 mA	Source-listed analog output
HART	Listed together with the 4-20 mA output
Modbus-485	Source-listed digital communication output

The source lists 4-20 mA / HART and Modbus-485 for the SS401-02 configuration.

Mechanical / Process Connection

The source specifies Thread / Flange (Optional) as the process connection. No separate dimension drawing or wiring diagram is provided in the supplied source PDF; no additional dimensions or installation values are added here.

Product Selection / Ordering Information

Selection	Configuration
Base model	SS401-02 — Smart Radar Level Gauge
Applicable media	High temperature, high pressure, slightly corrosive liquid
Measuring range	30 m
Output	4-20 mA / HART; Modbus-485
Supply and wiring	24 VDC; 2 Wire / 4 Wire
Antenna	Horn antenna; 304 stainless steel
Process connection	Thread / Flange (Optional)

Specify SS401-02 with the required output, wiring, antenna and process-connection configuration. Final configuration remains subject to the source-listed options.

CONTACT / SUPPORT

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