LPRS.03 series Self Adjusting "Smart" Radar Standard Measurement Sensors

Description

6,3G Smart Series radar level meter for liquids, slurries, granular materials and block level material non-contact continuous measurement for temperature, pressure changes; inert gases and volatile situations exist. Measurement method using microwave pulses, and can work in the industrial frequency band range. Low energy beam that can be installed in a variety of metals, non-metallic container or pipe, no harm to humans and the environment.

Principle

Transmitting and receiving a very short low energy pulses of microwave antenna system. Radar to the speed of light. Running time thereof can be converted into a digital signal by the electronic components. A special way to ensure that the extension of time very short stable and accurate measurement. Even under more complicated conditions, the presence of false echoes, with the latest micro-processing technology, and debugging software can accurately analyze the level of echo.

APPLICATIONS PROCESS

Food and Beverages

Water / Wastewater

Crude Oil

Light Oil

Temperature PP Rod : - 40 to 250°C (- 40 to 480°F)

Material Dielectric : Er >2

Working Pressure : -1...30 bar

Connection : Flanged DIN or ANSI

Voltatile Liquids

OPERATIONAL ELECTRICAL SPECIFICATION

 Operation
 : Pulse Radar
 DC
 : 24V DC (+/-10%)

 Accuracy
 : +/- 10 mm
 R load = (1/s = -6) / 24 m/s

Response Time

R load = (Vs — 6) / 24 mA

Standard Unit 2 - 3 echo's per sec.

Response Time : Standard Unit 2 - 3 echo's per sec. AC : 115 VAC 60 Hz or 230 VAC 50 Hz Frequency : 6,3 GHz.

Loss of Echo : 6,3 GHz. (+/-20%), 1.7 VA optional : Hold 1 min., 22mA or 2 mA. output Output : 4-20 mA, two wire Output 6.1 uA

Transmit Power : Hold 1 min., 22mA or 2 mA. output Output : 4-20 mA, two wire Output

Transmit Power : 50 uW average resolution 750 Ohms

Calibration : 50 uW average resolution 750 Ohms : Via communications port (required)

Calibration : Via communications port (required) Comm. : HART

Diagnostics : (Echo Profile) via communications port Display : LCD four digit as

Antenna : (Echo Profile) via communications port Display : LCD, four digit as optional : Stainless Steel

Range : Up to 30 m

ENVIRONMENTAL

Temperature : - 40 to 160°F (- 40 to 70°C) Protection : IP67

Approvals : FCC Part 15 - Low Power Installation Category : Class II

Communication Device

