

# 521SMART and 522SMART

Ultrasonic Level Transmitters and Controllers



- 4-20mA Level / Distance transmitter up to 15 Metres
- 2 Calibration Keys plus RS485 communications
- IP65 Flanged or threaded body
- Designed for use with liquids and bulk solids

The compact 521 and 522 ultrasonic level transmitters have been designed for the measurement of chemicals, liquids and granular solids in tanks and silos. By using a powerful single chip, a high speed processor and enhanced manufacturing techniques the 521 and 522 transmitters provide stable readings, accuracy & reliable measurements in many applications. The 521 and 522 transmitters feature calibration switches in the connection head enabling easy calibration. If the 521 & 522 transmitters are used as a two-threshold transmitter (Minimum & Maximum levels) calibration is performed by simply pressing two switches in a pre-established sequence. For more complex applications the transmitters can be configured by a PC through the RS485 port using the "SMART" software enabling the user to set up minimum & maximum thresholds, pump controls or self diagnostic alarms. The 521 and 522 transmitters come as a standard 24vDC version with options for 24, 115 & 230vAC power supply versions.

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# **Specification:**

Materials: Enclosure: IP65 PBT, Wetted Parts: Polypropylene

Mechanical installation: G2.5 "Bracket mechanical connection or DN150 PN6 flange

Electrical connection: Internal plug-in connectors

Working temperature:  $-30 \degree \text{ to } + 70 \degree \text{C}$ 

Pressure: From 0.7 to 1.3 bar (absolute)

Power supply: 24vDC standard, Optional 24,115, and 230vAC

Power consumption: 6 W

Analogue output: 4-20mA max load 750 ohm

Relays output: 2 x normally open contacts. 5A, 230vAC

Serial port: RS485 communications

Maximum measuring range: 521SMART – 0.6-10 Metres, 522SMART – 0.7 to 15 Metres

Blocking distance: 0.6m to 0.7m depending on model

Temperature compensation: PT100 from -30 to + 60 °C

Accuracy: +/- 1% Resolution: 3mm

Calibration: Two push buttons or by RS485 port

LED's display: Green LED flashing for echo receiving / Yellow LED's for relay 1 and relay 2

actions

## **Order Codes:**

### 521 Smart Ultrasonic Level Transmitter

Model	
521SMART	Ultrasonic Level control and measurement unit, programming by 2 Push buttons or via RS485 connection
	using a PC. Range of measurement: 0.6 to 10 Metres. 4-20mA output with 2 relays.
Version	Description
1	G2.5" (G2.5"A) Bracket, mechanical connection
2	Flanged DN150 PN6 PVC
<b>Housing Materials</b>	S .
D	PBT + Polypropylene
Power Supply	
0	24vAC 50-60Hz
1	115vAC 50-60Hz
2	230vAC 50-60Hz
4	24vDC (20-30vDC)
Accessories	
Α	None
Е	IP66 Programming Junction box for remote calibration of IP68 SMART level transmitters
F	PC Software for Ultrasonic level transmitter

#### 522 Smart Ultrasonic Level Transmitter

Model	
522SMART	Ultrasonic Level measure and control unit, programming by 2 Push buttons or via RS485 connection using a PC. Range of measurement: 0.7 to 15 Metres. 4-20mA output with 2 relays
Version	Description
1	G2.5" (G2.5"A) Bracket, mechanical connection
2	Flanged DN150 PN6 PVC
Housing Materials	S
D	PBT + Polypropylene
Power Supply	
0	24vAC 50-60Hz
1	115vAC 50-60Hz
2	230vAC 50-60Hz
4	24vDC (20-30vDC)
Accessories	
Α	None
Е	IP66 Programming Junction box for remote calibration of IP68 SMART level transmitters
F	PC Software for Ultrasonic level transmitter