

## ULTRASONIC NON-CONTACT



The level measurement is accomplished by emitting an ultrasonic pulse from the transducer face and measuring the elapsed time between sending this pulse and its reflected echo from the liquid surface. Since the speed of sound is temperature dependant, the transducer also measures ambient temperature to compensate for the changing velocity.



## ECHOTEL® 355

Ultrasonic non-contact transmitter for level, volume or open channel flow



## DESCRIPTION

Echotel® 355 is an integral mount, high performance ultrasonic non-contact transmitter for liquid level, volume and open channel flow measurement.

The electronics are housed in a single compartment cast aluminium or Lexan® housing. The intelligent electronics analyse the ultrasonic echo profile, apply temperature compensation, reject echoes from false targets, and then processes the true echo from the liquid surface. This results in an extremely reliable measurement even when application difficulties like turbulence and false echoes exist.

## FEATURES

2-wire loop powered intrinsically safe transmitter.

Fast and easy configuration via 2-line x 16 characters display and 4-button keypad.

False target rejection identifies true echo from liquid surface.

Common tank shapes and 20-point custom table for volume calculations.

Flume/weir primary elements and generic equation for open channel flow.

Process temperature from -40 °C to +80 °C (-40 °F to +175 °F).

Process pressure max 3 bar (43,5 psi).

Two 7-digit totalizers for flow:

- resettable
- continuous totalizer.

Suited for SIL 1 loops (full FMEDA report available).

## APPLICATIONS

Open channel flow flumes and weirs.

Paint, ink and solvent tanks.

Chemical storage.

Thick and viscous media.

Batch and day tanks.

Sumps.

## AGENCY APPROVALS

	Ex d	Ex ia	Ex n	Ex t	XP	IS	NI	Other
ATEX	•	•						
CCOE		•						
cFMus						•	•	
Inmetro	•	•						

SIL SIL 1 (1001)

Other approvals are available, consult factory for more details

## ECHOTEL® 335

Ultrasonic non-contact transmitter for level, volume or open channel flow



### DESCRIPTION

Echotel® 335 is an integral mount, high performance ultrasonic non-contact transmitter for liquid level, volume and open channel flow measurement.

The electronics are housed in a dual compartment housing separating field wiring from user interface electronics.

Advanced digital signal processing routines enable the 335 to perform in applications involving in-tank obstructions, light foam and agitation.

### FEATURES

Fast and easy calibration via 4 and 20 mA magnetic touch points.

LED indication for

- echo validity
- relay status (energised/de-energised).

Plug in custom / 6 digit display module (optional)

- for easy set up
- with bar graph display for liquid level % or echo strength.

Process temperature from -30 °C to +90 °C (-22 °F to +195 °F).

IP 67, dual compartment (field wiring / user interface electronics) in cast aluminium.

Signal output: linearised 4-20 mA and separate relay for level alarm or echo loss tracking.

2 separate totalisers for flow:

- daily resettable
- continuous totaliser.

Max level range: 8 m (26 ft).

### APPLICATIONS

Water and waste water: tank - open channel flow measurement.

Paper and pulp.

Paint, ink and solvent tanks.

General industry.

Oil and chemical storage.

Thick and viscous media.

Food and beverage.

Batch and day tanks.