

DTS300 SERIES

DENSITY TRANSMITTER

FEATURES

- ⊙ Real-time online liquid density and concentration measurement
- ⊙ Capacitive differential pressure with temperature compensation
- ⊙ Two-wire system with 4-20mA and RS485/HART optional
- ⊙ Compact and integrated design, easy to install
- ⊙ Supports remote calibration and monitoring
- ⊙ Ideal for petrochemical, food, mining, chemical, and power industries



INTRODUCTION

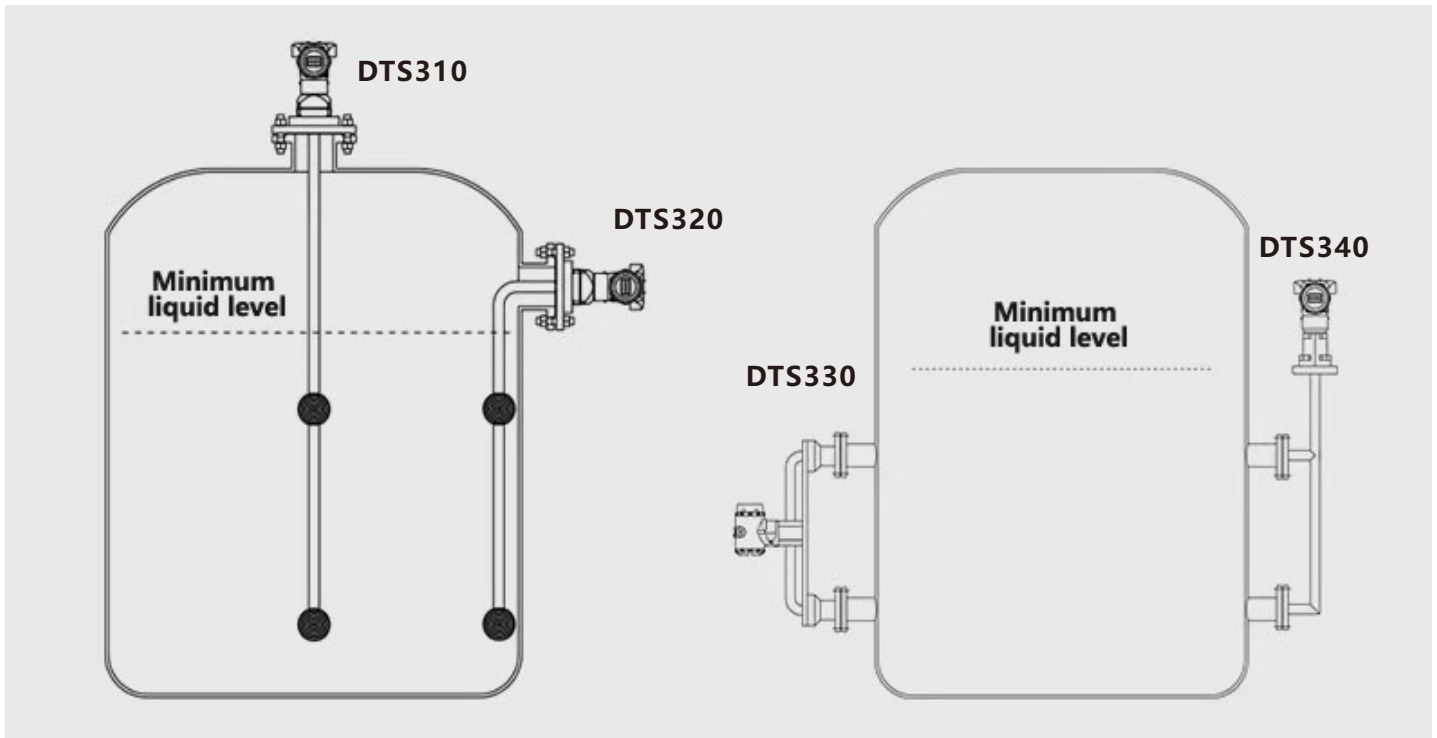
The DTS300 Series Smart Online Density Transmitter (also known as an online density meter) is designed for continuous real-time measurement of liquid density and concentration directly in industrial processes. It utilizes an advanced capacitive differential pressure sensor paired with two pressure relays inserted into the pipeline. A built-in temperature sensor is positioned between the relays to automatically compensate for process temperature changes, ensuring stable and accurate measurement.

As a two-wire transmitter, it outputs a 4-20mA analog signal proportional to the measured density or concentration and supports digital communication (RS485, HART) for remote calibration and monitoring. It is widely used in process control applications across various industries.

SPECIFICATIONS

Density range	0-3g/cm ³
Accuracy	0.2% 0.5%
Resolution	0.005g/cm ³
Output signal	4-20mA, RS485
Power supply	24VDC
Installation type	Side-mounted type, Direct insertion type, Bent-tube type, Inline type
Ambient temp.	-10~60°C
Diaphragm distance	500mm, 1000mm, 1500mm Others on request
Diaphragm material	SS316L, Hastelloy C, Titanium, Tantalum, Others on request

INSTALLATION



ORDER FORMAT

DTS340 - 1803LC5

Installation type	Model
Direct insertion type	DTS310
Bent-tube type	DTS320
Inline type	DTS330
Side-mounted type	DTS340

Range	Code
0-1g/cm ³	1
0-2g/cm ³	2
0-3g/cm ³	3

Flange	Code
DN50	50
DN65	65
DN80	80
DN100	100

Diaphragm distance	Code
500mm	5
1000mm	10
1500mm	15
Others on request	

Output signal	Code
4-20mA	C
RS485	R

Diaphragm material	Code
SS316L	3L
Hastelloy C	HC
Titanium	Ti