



#### **Product Description**

MD-3051 series online liquid level densitometer can be used for online density measurement of various liquid and liquid mixture. It is widely applied to the petrochemical industry, food industry, dairy industry, paper industry, chemical industry, biopharmaceutical industry and other production sites.

### **Specific Applied Scopes as Below**

1. the measurement of petroleum, natural gas, mining salt, oil refining, oil and water interface detection in the petrochemical industry

- **2.** the measurement of grape juice, tomato juice, fruit syrup, vegetable oil wine alcohol and soft drink processing in the food and dairy industry
- **3.** the measurement of black pulp, green pulp, white pulp and alkali solution in the paper industry
- **4.** the measurement of urea, detergents, ethylene glycol, lubricating oil, acid solution and polymer

#### **Main Features**

**1.** integrated structure transmitter with two-wire, no moving parts and maintain easily

2. four and a half digital LCD display

**3.** easy to install and use, display the digital as long as it is inserted into the liquid

**4.** for use in fluid or stationary liquid, and suitable for internal installation of pipes and tanks

**5.** two parameters (temperature and density) can be alternately displayed, for easy conversion of industry standard density

**6.** continuous online measurement of liquid density during non-interrupted process, can be directly used in the process control of production

**7.** wetted components are stainless steel, safe and sanitary

**8.** safe type for use in hazardous environments, hygienic type for use in food production site

# **Technical Parameters**

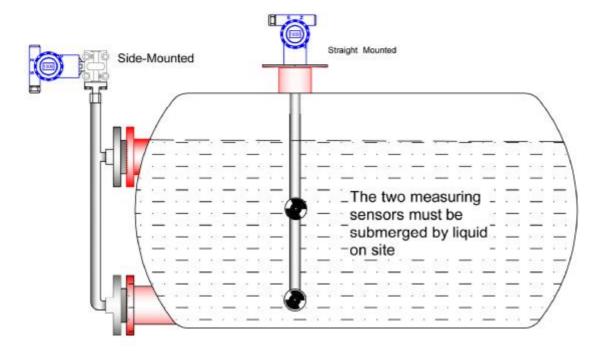
- 1. Current Output: 4 ~ 20mA
- 2. Digital Signal: HART protocol
- **3.** Power Supply: 16 ~ 30V DC (24V DC is recommended)
- **4.** Density Range: 0 to 2 g /cm<sup>3</sup>, 0 to 3 g / cm<sup>3</sup>
- **5.** Accuracy: 0.001 g / cm<sup>3</sup>
- **6.** Resolution: 0.0005 g /  $cm^3$
- 7. Temperature Range: 0 ~ 100  $^\circ\!\mathrm{C}$
- 8. Temperature Accuracy: 0.2  $^\circ\!\mathrm{C}$
- 9. Ambient Temperature: -10 ~ 60  $^\circ\!\mathrm{C}$
- **10.** Humidity Range: 0~90%

# Remarks

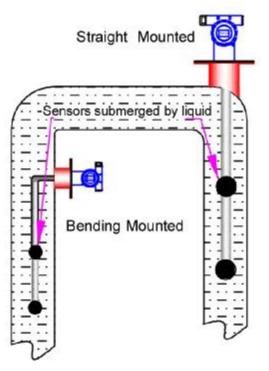
When ordering, please specify the medium, range and the site conditions, such as explosion-proof, corrosion, sanitary, general, etc.

# **Ordering Information Sheet**

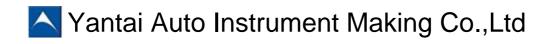
Model	Spec Code	Directions
MD3051		Industrial Online Liquid Level
		Densitometer
	A	Vertically Mounted Type (Header Connected with Cylinder)
Installation and	В	Vertically Mounted Type (Square Flanges Connected)
Shape	C	Pipes Mounted at Side Type
Sensor Spacing	5     10     15	500mm 1000mm Special Requirement
Measuring Range	1 2 3	$0 \sim 1 \text{ g/cm}^3$ $0 \sim 2 \text{ g/cm}^3$ $0 \sim 3 \text{ g/cm}^3$
Mounted Flanges	H6 H8 H10	DN65 DN80 DN100
Typical Model	MD3051A51H8	
Display Header		LCD Smart Display Header (0~100% linear display)
(optional) Output Signal	·····	4~20 mA
Diaphragm Material		316 Stainless Steel ( Others set )
Transport Package	Wooden Box	

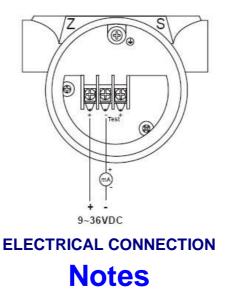


Installation within Tank (Diagram 1)



Installation within Pipe (Diagram 2)





The spacing between two sensors of the online liquid level densitometer should be at least 200mm, and the diameter is 50mm. Its size on site should not be less than the standard. If you select the bending type densitometer, please measure the size of flanges and the length of pipes inserted into the liquid.
The two measuring sensors must be submerged by liquid on site. Also the spacing between the first sensor and the flange can be selected.

**3.** MD3051 online liquid level densitometer can theoretically measure the density of different media. Users can convert the density results according to the situation on site.

**4.** The red parts in the diagrams are mounted matching flange, we can install it for users. If necessary, please indicate if the matching flange is needed when ordering.