

Liquid Level Measurement Series

The liquid level measurement series includes submerged liquid level measurement, capacitive liquid level measurement, floating ball liquid level measurement, etc.

- The submerged liquid level sensor adopts the principle of static pressure measurement, and calculates the liquid level height by detecting the pressure at the bottom of the liquid. It adopts a high-precision pressure-sensitive detection core, which has the characteristics of high measurement accuracy and good stability.
- Capacitive liquid level measurement measures the liquid level by the change in capacitance between two electrodes. The sensor has no mechanical moving parts, the structure is simple and reliable, the accuracy is high, the power consumption of the detection end is small, the dynamic response is fast, the maintenance is convenient, and the service life is long.
- The float type liquid level measurement is based on the detection principle of the reed switch, and uses the magnetic reed switch to complete the liquid level measurement. The product has the advantages of simple structure, good anti-vibration effect, strong corrosion resistance and long service life.
- Wired or battery powered; wired or wireless transmission to meet the needs of various industries.



Liquid Level Measurement



Product Image				
Product Name	Input Liquid Level Sensor	Anticorrosive Input Liquid Level Sensor	Capacitive Liquid Level Sensor	Compact Capacitive Liquid Level Sensor
Product Number	FST700-101	FST700-102	FST700-201	FST700-201B
Measuring Medium	Water, gasoline, diesel	Water, oil, acid, alkali and other corrosive liquid media	Diesel, gasoline, hydraulic oil	Diesel oil, kerosene, gasoline, hydraulic oil, biodiesel and other non-conductive liquids
Range	0~1...50M	0~1...30M	-0~5...2M	0~0.05... 0.3M, or 0.005M blind zone at the bottom of customized sensor
Signal Output	4~20 mA、0~5VDC RS485、0~10VDC	4~20 mA	4~20 mA、0~5VDC 0~10VDC	4~20 mA
Signal Wire Specification	2 Wire/3 Wire/4 Wire	2 Wire	2 Wire/3 Wire	2 Wire
Supply Voltage	9~30VDC、15~30VDC (0~10VDC)	24VDC	9~30VDC、15~30VDC (0~10VDC)	9~30VDC
Comprehensive Accuracy	±0.5%FS、±1%FS	±0.5%FS、±1%FS	±0.5%FS、±1%FS	±0.5%FS、±1%FS
Long Term Stability (1 Year)	±0.1%FS	±0.1%FS	±0.1%FS	±0.1%FS
Medium Temperature	-10~+70 °C (no freezing)	-10~+70°C (no freezing)	-40~+85°C	-10~+85°C
Storage Temperature	-40~+125°C	-40~+125°C	-40~+125°C	-40~+105°C
Media Compatibility	304 compatible media	Various media compatible with PTFE	Various non-conductive media compatible with 304	Various media compatible with PTFE
Degree of Protection	IP68	Electronic cabin: IP65 Probe: IP68	IP65	IP65
Material Science	304 stainless steel	Teflon	304 stainless steel	Probe: Φ8 Stainless steel Electronic compartment: stainless steel
Probe Diameter	Φ28.0	Φ30.5	Φ16.0	Φ8
Electrical Connection	Direct lead	Direct lead	Direct lead M12 connector	Direct lead M12 connector
Installation Method	Investment installation	Investment installation	G1/2 M20X1.5 M22X1.5	G1/2 M20X1.5 M22X1.5

Liquid Level Measurement



Product Image				
Product Name	Capacitive Intelligent Liquid Level Sensor	Capacitive Liquid Temperature Integrated Sensor	Oil Level Sensor	Fuel Level Sensor
Product Number	FST700-204	FST700-204A	FST700-205	FST700-206
Measuring Medium	Diesel oil, kerosene, Gasoline, hydraulic oil, etc	Diesel oil, kerosene, Gasoline, hydraulic oil, etc	Diesel oil, kerosene, Gasoline, hydraulic oil, etc	Diesel, gasoline, hydraulic oil
Range	02~2...1.8M	Oil level: 0~1800mm Temperature: - 30~90 °C	0~0.28...1M	0~0.5...1M
Signal Output	4~20mA、0~5V 0~10V、RS232、RS485	4~20 mA	10~180 Ω, 0~190 Ω, 240~30 Ω, others to be customized	4~20mA、0~5V
Signal Wire Specification	3 Wire/5 Wire	4 Wire	2 Wire	2 Wire/3 Wire
Supply Voltage	9~30VDC、15~30VDC (0~10VDC)	9~30VDC	—	9~30VDC
Comprehensive Accuracy	±0.5%FS、±1%FS	±0.5%FS	6~40mm	±1%FS
Long Term Stability (1 Year)	±0.1%FS	±0.1%FS	±0.1%FS	±0.2%FS
Medium Temperature	-40~+85°C	-30~+90°C	-40~+85° (no freezing)	-40~+70°C
Storage Temperature	-40~+125°C	-30~+90°C	-40~+90°C	-40~+85°C
Media Compatibility	Various non-conductive media compatible with aluminum alloy	Various non-conductive media compatible with aluminum alloy	304 compatible media	Various non-conductive media compatible with aluminum alloy
Degree of Protection	IP68	Above IP65	IP67	IP65
Material Science	Aluminum alloy or 304 stainless steel	Aluminium alloy	304 stainless steel	Polymer material or Aluminum alloy
Probe Diameter	Φ16.0	Φ16.0	Φ12.7	Φ16.0
Electrical Connection	Direct lead M12 connector	Direct lead	AMP or custom	Direct lead
Installation Method	5-hole flange G1/2 Φ40.0 Through hole installation M20X1.5 or customized	70° flange connection	BSP1-1/4 thread into SAE standard 5-hole flange	Flange installation

Liquid Level Measurement



Product Image			
Product Name	Capacitive Water Level Sensor	High Precision Capacitive Liquid Level Sensor	Capacitive Water Level Switch
Product Number	FST700-207	FST700-208	FST700-302
Measuring Medium	Water	Measurement of various non-conductive liquid media	Water
Range	0~0.2... 1M or customized	0.5, 0.7, 1, 1.5, 2M	Switch signal
Signal Output	4~20mA、0~5V	4~20mA、0~5V、0~10V RS485/TTL	PNP/NPN
Signal Wire Specification	2 Wire/3 Wire/4 Wire	3 Wire/4 Wire	3 Wire
Supply Voltage	15~30VDC	9~30VDC、15~30VDC(0~10V)	9~30VDC
Comprehensive Accuracy	±0.5%FS、±1%FS	±0.5%FS、±1%FS	——
Long Term Stability (1 Year)	±0.1%FS	±0.1%FS	±0.1%FS
Medium Temperature	-40~+85℃	-50~+200℃	0~100℃
Storage Temperature	-40~+85℃	-40~+85℃	-20~+85℃
Media Compatibility	304 compatible media	304/316L compatible media	Various conductive media compatible with aluminum alloy
Degree of Protection	IP65	IP65	IP67
Material Science	Three hundred and four	304 or 316L	304, aluminum
Probe Diameter	Φ12.7	Φ12.0	Φ6.0
Electrical Connection	Direct lead M12 connector	Direct lead M12 connector	Direct lead
Installation Method	5-hole flange G1/2 Φ40.0 Through hole installation M20X1.5 or customized	M20x1.5、M22x1.5、G1/2	M20x1.5、M22x1.5、G1/2

Liquid Level Measurement



Product Image			
Product Name	Low Power Input Liquid Level Transmitter	Low Power Input Liquid Level Sensor	Low Power Consumption Liquid Temperature Integrated Transmitter
Product Number	FST100-7001	FST100-7002	FST100-7003
Measuring Medium	Water, gas oil, diesel	Water, gas oil, diesel	Water, gas oil, diesel
Measuring Range	0~1...50M	0~1...50M	Liquid level: 0~1... 50M Temperature: -20~85°C
Output Signal	0.25~1.25/ 0.25~2.25/ 0.5~2.5, 10%~90%Vcc	RS485、IIC	RS485
Supply Voltage	3~5V DC	3~4.2V DC (RS485) (applicable to battery power supply) 3~5V DC (IIC)	3~4.2V DC (applicable to battery power supply)
Power Consumption Current	≤2.7mA	≤2.5mA (Standby: ≤0.2mA)	≤2.5mA (Standby: ≤0.2mA)
Accuracy	±0.5%FS、±1%FS	±0.5%FS、±1%FS	±0.5%FS、±1%FS
Ambient Temperature	-10~+85°C (No freezing)	-10~+85°C (No freezing)	-10~+85°C (No freezing)
Long Term Stability (1 Year)	±0.2%FS	±0.2%FS	±0.2%FS
Probe Diameter (mm)	Φ28	Φ28	Φ28
Degree of Protection	IP68	IP68	IP68
Measuring Medium	304 stainless steel	304 stainless steel	304 stainless steel
Electrical Connection	Direct lead	Direct lead	Direct lead
Installation Method	Input type	Input type	Input type

Liquid Level Measurement



Product Image			
Product Name	Wireless Input Liquid Level Sensor		Wireless Input Liquid Level Sensor
Product Number	FST100-7101		FST100-7101A
Measuring Range	0~1...50M		0~1...50M LCD display
Transmission Mode	LoRa/NB-IoT/4G LoRa working frequency band: 470MHz/868MHz		LoRa/NB-IoT LoRa working frequency band: 470MHz/868MHz
Communication Protocol	MQTT protocol: 4G/NB-IoT LWM2M protocol: NB-IoT LoRaWAN protocol: LoRa (Class A, OTAA mode activation)		MQTT protocol: NB-IoT LWM2M protocol: NB-IoT LoRaWAN protocol: LoRa (Class A, OTAA mode activation)
Power Supply Mode	3.6V battery powered 12~30VDC external power supply		3.6V battery powered 12~30VDC external power supply
Power Consumption Current	4G/NB-IoT Sleep current: $\leq 20\mu A$ Sampling current: $\leq 5mA$ (lasting for 1s) Average communication current: $\leq 60mA$ (lasting for 15s) Online current: $\leq 10mA$ (lasting for 60s) LoRaWAN Sleep current $< 5\mu A$ Sampling current $< 5mA$ Sending current $< 140mA$ Receive current $< 20mA$		NB-IoT Dormant Current: $25\mu A$ Sampling Current: $5mA$ (last 1s) Communication mean Current: GPRS $80mA$ (last 13s) NB-IoT $80mA$ (last 13s) Online current: $15mA$ (last 90s) LoRaWAN Sleep current: $\leq 25\mu A$ Sampling current: $\leq 5mA$ (lasting for 400ms) Average communication current: $\leq 35mA$ (lasting for 2s)
Sampling Frequency	1-1440 minutes can be set	1 minute 1-720 minutes can be set	1-1440 minutes can be set 1 minute 1-720 minutes can be set
Sending Frequency	1-1440 minutes can be set		1-1440 minutes can be set
Accuracy	$\pm 0.5\%FS$ 、 $1\%FS$		$\pm 0.5\%FS$ 、 $1\%FS$
Battery Capacity	8000mAh		13000mAh
Ambient Temperature	-20~60°C、0%~80%RH		-20~60°C、0%~80%RH
Degree of Protection	Liquid contacting parts: IP68 Industrial housing: IP65		Liquid contacting parts: IP68 Industrial housing: IP65
Material Science	Contact material: 304 stainless steel Industrial housing: Aluminum die casting		Contact material: 304 stainless steel Industrial housing: PC、ABS
Transmission Distance	Visual signal intensity	LoRaWAN Empty environment: 2000 meters Urban environment: 1000 meters	Visual signal intensity LoRaWAN Empty environment: 2000 meters Urban environment: 1000 meters