

Temperature Measurement Series

The temperature measurement series is suitable for contact temperature measurement of liquids, gases and objects.

- The product has built-in high-performance digital circuits, and is carefully designed for radio frequency, electromagnetic interference, and surge voltage conditions.
- It has the characteristics of fast response speed, high precision and good long-term stability.
- Wired/battery power supply and wired and wireless transmission modes to meet the needs of various industries.



Temperature Measurement



Product Image			
Product Name	Temperature Sensor	Integrated Temperature Transmitter	Integrated Isolated Temperature Transmitter
Product Number	FST600-101	FST600-202	FST600-203
Measuring Range	-50~400°C Note: If the temperature exceeds 120°C, add isolation	-50~120°C Note: If the temperature exceeds 120°C, add isolation	-50~400°C Note: If the temperature exceeds 120°C, add isolation
Output Signal	Resistance signal	4~20mA、0~5VDC、0~10VDC	4~20mA、0~5VDC、0~10VDC
Signal Line Specifications	2 Wire / 3 Wire	2 Wire / 3 Wire	2 Wire / 3 Wire
Power Supply	—	9~30VDC 15~30VDC(0~10VDC)	9~30VDC 15~30VDC(0~10VDC)
Temperature Measuring Element	PT100、PT1000	PT1000	PT1000
Precision	Class A, Class B, Class 1/3B	±0.5%FS	±0.5%FS
Long-term Stability (1 Year)	±0.1%FS	±0.1%FS	±0.1%FS
Response Time	T=50°C 2.3s T=90°C 5.4s	T=50°C 2.3s T=90°C 5.4s	T=50°C 2.3s T=90°C 5.4s
Pressure Resistance	Typical (40bar)	Typical (40bar)	Typical (40bar)
Operating Temperature	-40°C~+125°C	-40~+85°C	-40~+85°C
Storage Temperature	-40°C~+125°C	-40°C~+125°C	-40°C~+125°C
Shell Material	304 stainless steel	304 stainless steel	304 stainless steel
Media Compatibility	Various media compatible with 304	Various media compatible with 304	Various media compatible with 304
Mounting Thread	G1/4 or customized as required	M20X1.5 G1/4 NPT1/4 or customized upon request	M20X1.5 G1/4 NPT1/4 or customized upon request
Protection Class	IP65	IP65	IP65
Electrical Connections	Direct outlet、Air plug Hirschmann	Direct outlet, Aviation plug Hirschmann, Cable entry	Direct outlet, Aviation plug Hirschmann, Cable entry

Temperature Measurement



Product Image			
Product Name	Digital Temperature Transmitter	Explosion-proof temperature transmitter	Electronic Temperature Switch
Product Number	FST600-204	FST600-205	FST600-206
Measuring Range	-50~400°C Note: If the temperature exceeds 120°C, add isolation	-50~400°C Note: If the temperature exceeds 120°C, add isolation	-50~400°C Note: If the temperature exceeds 120°C, add isolation
Output Signal	4~20mA	4~20mA、0~5VDC、0~10VDC RS232、RS485	4~20mA、0~5VDC、0~10VDC Control Output: Transistor/Relay
Signal Line Specifications	2 Wire	2 Wire / 3 Wire / 4 Wire	5 Wire
Power Supply	15~30VDC	9~28VDC、15~28VDC(0~10VDC)	9~30VDC、15~30VDC(0~10VDC)
Temperature Measuring Element	PT1000	PT1000	PT100
Precision	±0.5%FS	±0.5%FS、±1%FS	±0.5%FS
Long-term Stability (1 Year)	±0.1%FS	±0.1%FS	±0.1%FS
Response Time	T=50°C 2.3s T=90°C 5.4s	T=50°C 2.3s T=90°C 5.4s	T=50°C 2.3s T=90°C 5.4s
Pressure Resistance	Typical (40bar)	Typical (40bar)	Typical (40bar)
Operating Temperature	-40°C~+85°C	-20°C~+60°C (LCD display) -40°C~+60°C (LCD display)	-40~+85°C
Storage Temperature	-40°C~+125°C	-40°C~+125°C	-40°C~+125°C
Shell Material	304 stainless steel	304 stainless steel	304 stainless steel
Media Compatibility	Various media compatible with 304	Various media compatible with 304	Various media compatible with 304
Mounting Thread	M20X1.5 G1/4 NPT1/4 or customized upon request	M20X1.5 G1/4 NPT1/4 or customized upon request	M20X1.5 G1/4 NPT1/4 or customized upon request
Protection Class	IP65	IP65	IP65
Electrical Connections	Hirschmann, Cable entry	Direct outlet, Cable entry	M12 connector
Explosion-proof Grade	—	Ex d IIC T6 Gb	—

Temperature Measurement



Product Image			
Product Name	Intrinsically Safe Temperature Transmitter	Digital Temperature Transmitter	Low Power Temperature Transmitter
Product Number	FST600-207	FST600-901	FST100-6002
Measuring Range	-200~+100°C	-50~400°C Note: If the temperature exceeds 120°C, add isolation	-50~400°C Range>120°C, using isolation type
Output Signal	4~20mA	RS232、RS485	RS485
Signal Line Specifications	2 Wire	—	—
Power Supply	15~28VDC	9~30VDC	3~5VDC or according to user requirements
Current Consumption	—	—	≤2.5mA (standby: ≤0.2mA)
Temperature Measuring Element	PT100、PT1000	—	—
Precision	±0.5%FS	±0.5%FS	±0.5%FS、±1%FS
Long-term Stability (1 Year)	±0.1%FS	±0.1%FS	±0.1%FS
Probe diameter (mm)	—	Φ6、Φ8	Φ6、Φ8
Response Time	T=50°C 2.3s T=90°C 5.4s	—	—
Pressure Resistance	Typical (40bar)	Typical (40bar)	Typical: 40bar(Max: 300bar)
Operating Temperature	-40°C~+85°C	-40~+85°C	-40~+85°C
Storage Temperature	-40°C~+125°C	—	—
Shell Material	304 stainless steel	304 stainless steel	304 stainless steel
Media Compatibility	Various media compatible with 304	Various media compatible with 304	Gas, Liquid
Mounting Thread	M20X1.5 G1/4 NPT1/4 or customized upon request	M20X1.5 G1/4 NPT1/4 or customized upon request	M20X1.5 G1/4 NPT1/4 or customized upon request
Protection Class	IP65	IP65	IP65
Electrical Connections	Cable entry	Direct outlet, Aviation plug Hirschmann	Direct lead, Hirschmann, Threadless Explosion-proof end fittings
Explosion-proof Grade	Ex ia IIC T6 Ga	—	—

Temperature Measurement



Product Image		
Product Name	Wireless Temperature Sensor	
Product Number	FST100-6101	
Measuring Range	-50~400°C, LCD display (optional) Range>120°C, using isolation	
Transfer Method	4G/Lora/NB-IoT LoRa working frequency band: 470MHz/868MHz	
Protocol	MQTT protocol: 4G/NB-IoT LWM2M Protocol: NB-IoT LoRaWAN protocol: LoRa (Class A, OTAA activation)	
Power Supply	3.6V battery power supply 12~30VDC external power supply	
Current Consumption	4G/NB-IoT Sleep current: $\leq 20\mu A$ Sampling current: $\leq 5mA$ (for 1s) Communication average current: $\leq 60mA$ (lasting 15s) Online current: $\leq 10mA$ (continuously 60s)	LoRaWAN Sleep current is less than $5\mu A$ The sampling current is less than $5mA$ The sending current is less than $140mA$ Receive current less than $20mA$
Sampling Frequency	1-1440 minutes can be set	1 minute 1-720 minutes can be set
Upload Frequency	1-1440 minutes can be set	
Precision	$\pm 0.5\%FS$ 、 $1\%FS$	
Battery Capacity	8000mAh	
Pressure Resistance	Typical: 40bar(Max:300bar)	
Ambient Temperature	-20~60°C; 0%~80%RH	
Protection Class	IP65	
Material	304、Aluminum die-casting	
Transmission Distance	Depending on signal strength	LoRaWAN Open environment: 2000 meters Urban environment: 1000 meters
Installation Interface	M20X1.5 G1/4 (others need to be customized)	