

By employing different methods of air temperature monitoring and contact-based temperature detection, a wide range of applications in various industries can be achieved. The use of food-grade materials ensures safety and applicability in cold chain and medical applications, while also covering large-range temperature detection for industrial purposes. This versatility allows for the fulfillment of everyday needs, ranging from food-grade to industrial-grade applications.









Cold-chain Medicine Factory Apartment

Milesight











TS101

LoRaWAN® Temperature Sensor TS30X

Temperature and Humidity Sensor EM320-TH

Temperature & Humidity Senso EM300-TH

ndustrial Temperature Senso EM500-PT100

| Temperature Range | -30°C~+70°C | B05-125-200:-40°C~125°C AF10-125-100:-40°C~125°C A05-500-150:-50°C-500°C | -30°C to +60°C | -30°C -70°C | T050:-200°C to +50°C T200: -50°C to +200°C T500: -50°C to +500°C T800:-50°C to +800°C |
|----------------------------|--|---|---|--|--|
| Temperature Sensor Type | DS18B20 | PT100 Class B Food-Grade PT100 Class A Industrial-Grade PT100 Class A | Digital | Digital | PT100 Class A PT100 Class B |
| Detecting Way | Contact Temperature Measurement | Contact Temperature Measurement | Air Temperature Measurement | Air Temperature Measurement | Contact Temperature Measurement |
| Probe | Needle Food Grade 316 Stainless Steel | Straight Tube 304 Stainless Steel Needle Food Grade 316 Stainless Steel Straight tube 304Stainless Steel | Air Temperature Measurement | 1 | Straight Tube (Customizable) |
| Humidity Detection | × | × | | √ | × |
| Range of Applications | Plug-in Temperature Detection for Food-Related Scenarios | Low-Cost & Non-Food Grade Solution Food-Grade Applications Wide Temperature Range for Industrial Environments | Indoor and Outdoor Air Temperature and Humidity | Indoor and Outdoor Air Temperature and Humidity | Large-Range Industrial-Grade & Temperature-Critical Detecting |
| Typical Application | Tobacco Storage Farm Haystacks Compost Piles | medical industry, including pharmaceutical refrigeration, storage, transportation, etc. Restaurants, cafeterias, food processing plants, cold chain fresh transportation, and other food-related scenarios Factory workshops, fire alarms, and temperature monitoring of hot water systems in buildings | Inside Freezers/Boxes Refrigerated Transport Vehicles Logistics Transport Vehicles Park School Outdoor Area City Streets Basement Storage Room) | Park School Outdoor Area City Streets Basement Storage Room | Motors Boilers |
| Food Grade | \checkmark | √ | 1 | × | × |
| Accuracy | ± 0.5°C | B05-125-200: ± 0.5°C (-40°C~40°C), ± 1°C (40°C~125°C) AF10-125-100: ± 0.4°C A05-500-150: ± 0.5°C | +/- 0.2°C | 0°C to + 70°C (+/- 0.3°C) -30°C to 0°C (+/- 0.6°C) | ±0.5°C |
| Power Supply | 1 × 4000 mAh ER18505 Li- SOCL₂ Replaceable Battery | 2 × 4000 mAh ER18505 Li- SOCL2 Batteries or Type-C USB (5V/1A) | 2 × 2700 mAh ER14505 Li- SOCL2 Batteries | 1 × 4000 mAh ER18505 Li- SOCL2 battery (extendable to 2 batteries) | 19000 mAh Li-SOCL2 battery (ER34615) |
| Battery Life | 10 Years (1 Hour Report Interval, 25°C) | 1 | ≥5 years (10 min interval with data retransmission disabled) | 10 years (10 min interval) | 10 Years (10 min interval) |

