

LoRa® SPY TO



 $\label{eq:conder} \mbox{Universal analog input recorder}$ with a long-range LoRaWAN $\mbox{^{TM}}$ connectivity



Presentation

The LoRa® SPY T0 recorder measures and records temperature.

Data are sent to the JRI secure Cloud by the LoRaWANTM network of the telecom operators members of the LoRa AllianceTM, or by a local network. In case of thresholds excursion, real-time alerts are sent.

Robust and waterproof, it is adapted to the cold chain monitoring during transportation.

Technical features

Interface Measurement range -35°C to +85°C Accuracy ±0.5°C from -20°C to +30°C and ±0.8°C out of this range Memory 10 000 data points Radio range Up to 16 km open field range Internal Class A PT 100 Resolution Measuring interval Adjustable from 1 mn to 5 mn Transmission & recording interval (internal memory) Response time \$\sigma_{90}\$ Protection Protection Case Polycarbonate - Food contact Dimensions and weight Replaceable Lithium 3,6v battery Battery lifetime Fixation Fixing evelets	Communication frequency	868MHz	915MHz	
Accuracy±0.5°C from -20°C to +30°C and ±0.8°C out of this rangeMemory10 000 data pointsRadio rangeUp to 16 km open field rangeSensorInternal Class A PT 100Resolution0.01Measuring intervalAdjustable from 1 mn to 5 mnTransmission & recording interval (internal memory)Adjustable from 1 mn to 24 hrsResponse time σ ₉₀ ~15 mnOperating conditions-35°C to +85°CProtectionIP68CasePolycarbonate – Food contactDimensions and weight87 x 64 x 25 mm/~ 100 gPower supplyReplaceable Lithium 3,6v batteryBattery lifetime2 to 4 years depending on use	Interface	Status LED lights, On/Off touch sensitive button		
Memory 10 000 data points Radio range Up to 16 km open field range Sensor Internal Class A PT 100 Resolution 0.01 Measuring interval Adjustable from 1 mn to 5 mn Transmission & recording interval (internal memory) Adjustable from 1 mn to 24 hrs Response time σ ₉₀ ~15 mn Operating conditions -35°C to +85°C Protection IP68 Case Polycarbonate – Food contact Dimensions and weight 87 x 64 x 25 mm / ~ 100 g Power supply Replaceable Lithium 3,6v battery Battery lifetime 2 to 4 years depending on use	Measurement range	-35°C to +85°C		
Radio range Up to 16 km open field range Sensor Internal Class A PT 100 Resolution 0.01 Measuring interval Adjustable from 1 mn to 5 mn Transmission & recording interval (internal memory) Adjustable from 1 mn to 24 hrs Response time σ ₉₀ ~15 mn Operating conditions -35°C to +85°C Protection IP68 Case Polycarbonate – Food contact Dimensions and weight 87 x 64 x 25 mm/~ 100 g Power supply Replaceable Lithium 3,6v battery Battery lifetime 2 to 4 years depending on use	Accuracy	$\pm 0.5^{\circ}\text{C}$ from -20°C to +30°C and $\pm 0.8^{\circ}\text{C}$ out of this range		
Sensor Internal Class A PT 100 Resolution 0.01 Measuring interval Adjustable from 1 mn to 5 mn Transmission & recording interval (internal memory) Adjustable from 1 mn to 24 hrs Response time σ₀₀ ~15 mn Operating conditions -35°C to +85°C Protection IP68 Case Polycarbonate – Food contact Dimensions and weight 87 x 64 x 25 mm / ~ 100 g Power supply Replaceable Lithium 3,6v battery Battery lifetime 2 to 4 years depending on use	Memory	10 000 data points		
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Transmission & recording interval (internal memory) Response time σ_{90} Operating conditions Protection Case Polycarbonate – Food contact Dimensions and weight Power supply Battery lifetime Adjustable from 1 mn to 24 hrs 15 mn P15 mn P168 P25°C to +85°C Protection RP68 Polycarbonate – Food contact 87 x 64 x 25 mm / ~ 100 g Replaceable Lithium 3,6v battery	Resolution	0.01		
(internal memory) Adjustable from 1 mn to 24 hrs Response time σ ₉₀ ~15 mn Operating conditions -35°C to +85°C Protection IP68 Case Polycarbonate – Food contact Dimensions and weight 87 x 64 x 25 mm/~ 100 g Power supply Replaceable Lithium 3,6v battery Battery lifetime 2 to 4 years depending on use	Measuring interval	Adjustable from 1 mn to 5 mn		
Operating conditions Protection Protection Case Polycarbonate – Food contact Dimensions and weight Power supply Replaceable Lithium 3,6v battery Battery lifetime 2 to 4 years depending on use		Adjustable from 1 mn to 24 hrs		
Protection IP68 Case Polycarbonate – Food contact Dimensions and weight 87 x 64 x 25 mm / ~ 100 g Power supply Replaceable Lithium 3,6v battery Battery lifetime 2 to 4 years depending on use	Response time $\sigma_{_{90}}$	~15 mn		
Case Polycarbonate – Food contact Dimensions and weight 87 x 64 x 25 mm/~ 100 g Power supply Replaceable Lithium 3,6v battery Battery lifetime 2 to 4 years depending on use	Operating conditions	-35°C to +85°C		
Dimensions and weight 87 x 64 x 25 mm/~ 100 g Power supply Replaceable Lithium 3,6v battery 2 to 4 years depending on use	Protection	IP68		
Power supply Replaceable Lithium 3,6v battery Battery lifetime 2 to 4 years depending on use	Case	Polycarbonate – Food contact		
Battery lifetime 2 to 4 years depending on use	Dimensions and weight	87 x 64 x 25 r	mm/~100g	
	Power supply	Replaceable Lithium 3,6v battery		
Fixation Fixing evelets	Battery lifetime	2 to 4 years dep	to 4 years depending on use	
Traction	Fixation	Fixing eyelets		
Supplied with Battery, user manual on www.jri-corp.com	Supplied with	Battery, user manual on www.jri-corp.com		
Compliance CE, ROHS, FCC, EN 300-320, NF EN 12830	Compliance	CE, ROHS, FCC, EN 300-320, NF EN 12830		
Standard calibration points -18°C/+5°C/+25°C	Standard calibration points	-18°C/+5°C/+25°C		

Benefits

Easy-to-use
 The recorder is ready-to-use and has operating and alarm lights



- Excellent measurement accuracy
- Several modes of data exploitation

Fixing eyelets

Replaceable battery

ART NRS

11801 EU : LoRa® SPYT0 868MHz (with battery) 11801 EX : LoRa® SPY T0 868MHz (with battery) 12266 EX : LoRa® SPYT0 915 MHz (without battery) 17 347b EN 01 05