

RFGate NFU-TL021 NFC Temperature Logger

RFGate NFU-TL021 temperature logger, large tag memory and dual frequency NFC and RAIN RFID make it easy to create solutions for tracking during transport of temperature sensitive products.

The RFID interface allows the massive reading of products at long distance through checkpoints or RFID gates while the NFC interface allows manual control of the single product by the employees or the consumer.

This tag can be configured to store in the internal memory up to 4,864 temperature readings with intervals from 1 second to 60 minutes, also specifying different alarm thresholds to guarantee an accurate analysis of temperature changes.

The compact size of the tag allows the use of the logger in many applications. Also, being a semi-passive tag it can be used for air shipments.

Protocols

- NFC
- RFID ISO 14443 Type A, RAIN RFID EPC Class 1 Gen 2 ISO18000-63

Frequency Of Use

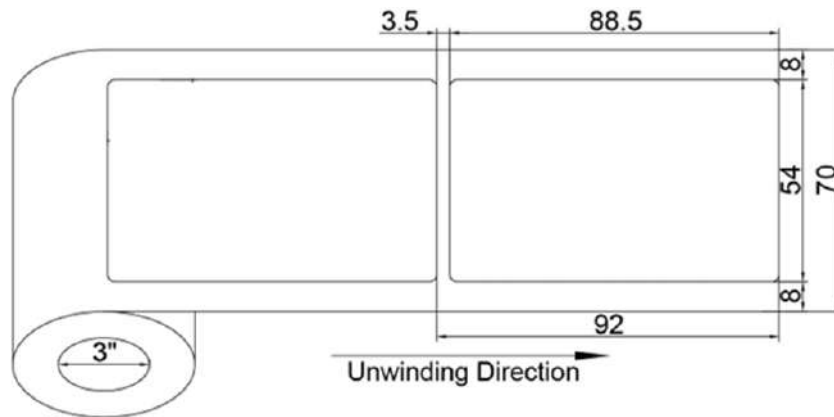
- NFC
- HF 13.56 MHz, RAIN
- UHF 860-866 MHz

Technical Specifications

- ▶ **Tag Type**
Semi Passive
- ▶ **Usage Temperature**
-40 ° C to 80 ° C
- ▶ **Reading Distance**
2500 pcs on reel
- ▶ **Reel Core Inner Diameter**
 - NFC
 - HF: up to 5 cm, RAIN
 - UHF: up to 5 meters
- ▶ **EPC**
160 Kbits
- ▶ **Battery Life**
Up To 1 Year (Depending On Temperatures)

MECHANICAL

1. Appearance



2. Electrical Characteristics

Electrical Characteristics			
Item	Description	Remarks	
Model	NFU-TL021		
Base Material	PET		
Antenna	Al(30μm) +PET (50μm) +Al (10μm) Al Etching Al(30μm)+PET(50μm)+Al bridge (10μm)		
Memory	TID	Memory	
	EPC	160k bits	Read Only
	User Memory	160k bits	Read & Write
	Password		
Protocol	ISO/IEC 14443- A EPC Global C1G2 V1.2.0		
Measurable temperature range	-35 °C ~ 50 °C		
Accuracy	±0.5 °C		
Measuring interval	1 second~65535 second		
Paper battery working hour	1 year(1 second measuring interval)		

3. Environmental

▶ Temperature/Humidity for Label Attaching

[10°C to 40°C] 20% to 80%RH

▶ Temperature/Humidity after Label Attached to the Products

[-20°C to + 50°C] 20% to 80%RH

(Environmental requirements of adhesive may vary on different materials).

▶ Shelf Life

From the date of manufacture, Half a year at 23±5°C / 50%±10%RH), vacuum bag and avoid direct sunlight .

▶ Disclaimer

Our recommendations are based on our latest knowledge and experience. We reserve all rights for final explanation. Product usage life time can be vary according to logging period.

4. Handling

Keep away from water and collision. DO NOT BEND.

Special requirement : NONE

Usage Areas

