

iEi[®] HF RFID TAG

Intelligent HF RFID Sensor Tag/Data Logger



New



Features

- Support temperature, vibration, ambient light, humidity, GPS data logging
- All-in-one design: built-in HF RFID sensor, data logger and USB 2.0 Disk
- Maximum storage: 134 million of data logging.
- 13.56 MHz RFID, ISO15693 RF air protocol
- Design for long term data recording
- Fast and efficient wireless RFID for reading out the instant data
- Support time-stamp
- Configurable duration from 1 second to 12 hour for one record

Specifications

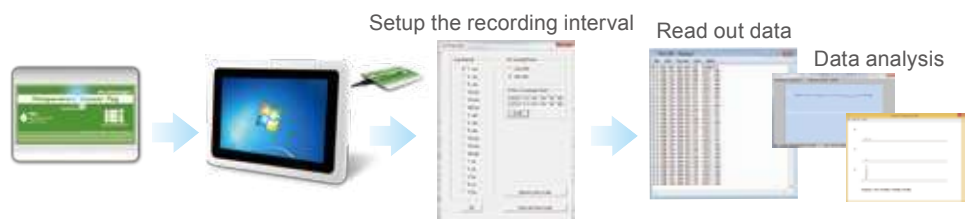
| Model Number | RFID-TP-D-ST-R10 | RFID-VB-D-ST-R10 | RFID-AL-D-ST-R10 | RFID-HT-D-ST-R10 | RFID-GPS-D-ST-R10 | RFID-STP-D-ST-R10 | RFID-TP-N-ST-R10 | |
|------------------------|---|--|---|---|---|---|---|-----------------------------|
| Function | Temperature sensor tag plus data logger | Vibration sensor tag plus data logger | Ambient light sensor Ttag plus data logger | Humidity and temperature sensor tag plus data logger | GPS sensor tag plus data logger | Slim RFID temperature sensor plus data logger | RFID temperature sensor tag | |
| Application | Frozen food Environment monitor | Transportation quality Machine abnormality | Environment monitor | Environment monitor | Transportation tracking | Frozen food Environment monitor | Frozen food Environment monitor | |
| Datalogger | Yes | Yes | Yes | Yes | Yes | Yes | No | |
| Normal Used Range | From -20°C to 60°C | From -20°C to 60°C | From -20°C to 60°C | From -20°C to 60°C | From -20°C to 60°C | From -20°C to 60°C | From -20°C to 60°C | |
| Accuracy | 0.5°C (max) from 0°C to +65°C 1.0°C (max) from -40°C to +125°C | Full scale ±8g Output data rate 50Hz Max. resolution 3.9mg | Full scale 16000 LUX Resolution ±4 LUX | Relative Humidity ±2%, From 0% to 100% Temperature ±0.2°C (-40°C to 125°C) | <3m | 0.5°C (max) from 0°C to +65°C 1.0°C (max) from -40°C to +125°C | 0.5°C (max) from 0°C to +65°C 1.0°C (max) from -40°C to +125°C | |
| Max Storage | 134,217,724 points (4GB) | 134,217,724 points (4GB) | 134,217,724 points (4GB) | 134,217,724 points (4GB) | 67,108,862 points (4GB) | 3423 points (107KB) | 1 point | |
| Time stamp | Yes | Yes | Yes | Yes | Yes | Yes | NO | |
| Record Interval | 1, 2, 5, 10, 15, 30 sec 1, 2, 5, 10, 15, 30 min 1, 2, 3, 6, 12 hr | 50Hz | 1, 2, 5, 10, 15, 30 sec 1, 2, 5, 10, 15, 30 min 1, 2, 3, 6, 12 hr | 1, 2, 5, 10, 15, 30 sec 1, 2, 5, 10, 15, 30 min 1, 2, 3, 6, 12 hr | 1, 2, 5, 10, 15, 30 sec 1, 2, 5, 10, 15, 30 min 1, 2, 3, 6, 12 hr | 1, 2, 5, 10, 15, 30 sec 1, 2, 5, 10, 15, 30 min 1, 2, 3, 6, 12 hr | NA | |
| Indicator (LED) | Short flash once: recording Short flash twice: error message | | | | | | Short flash once: recording | Short flash once: recording |
| PC Interface | USB 2.0 mass storage device | | | | | | NA | NA |
| RFID | ISO 15693, 13.56MHz | ISO 15693, 13.56MHz | ISO 15693, 13.56MHz | ISO 15693, 13.56MHz | ISO 15693, 13.56MHz | ISO 15693, 13.56MHz | ISO 15693, 13.56MHz | |
| Power Supply | 4.0 to 5.5 VDC | 4.0 to 5.5 VDC | 4.0 to 5.5 VDC | 4.0 to 5.5 VDC | 4.0 to 5.5 VDC | 4.0 to 5.5 VDC | NA | |
| Battery | Battery pack AA by 4 IP20 | Battery pack AA by 4 IP20 | Battery pack AA by 4 IP20 | Battery pack AA by 4 IP20 | Battery pack AA by 4 IP20 | 20mAh film battery inside IP20 | N/A | |
| Cerification | FCC CLASS A | FCC CLASS A | FCC CLASS A | FCC CLASS A | FCC CLASS A | FCC CLASS A | FCC CLASS A | |
| Dimensions (L x W x H) | 12 cm x 8 cm x 3 cm | 12 cm x 8 cm x 3 cm | 12 cm x 8 cm x 3 cm | 12 cm x 8 cm x 3 cm | 12 cm x 8 cm x 3 cm | 9.2 cm x 6.6 cm x 0.2 cm | 9.2 cm x 6.6 cm x 0.1 cm | |

HF RFID Sensor Tag Plus Data Logger

The HF RFID tag series is designed for long-term temperature, vibration, ambient light, humidity and GPS recording. It uses an SD card as a mass storage media which can continually store 134 million points (four gigabytes for a file) of temperature when using continuous power (such as using USB power adapters). If continuous power is not available, it can use a one time battery case or a rechargeable battery bank which may support one week to one month recording depending on the recording duration and the type of the battery. The recording period can be configured from one second to twelve hours for one recording event. Recording data is easily to be read from the USB port. The data stored on a file is called "RECORD.TXT", which is auto-generated and can be opened by Notepad or Excel directly.

Configure the Device

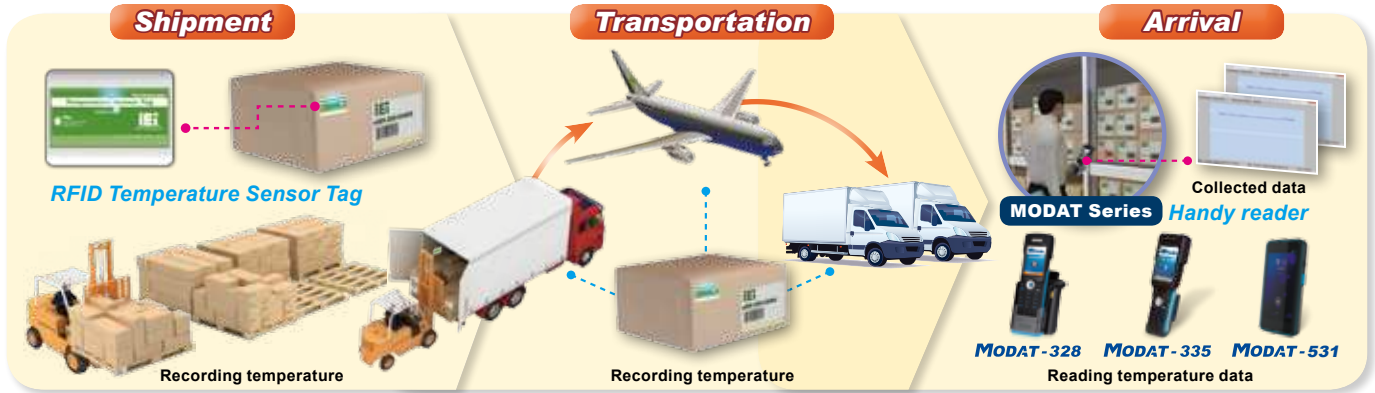
Before using this device, the user has to setup the recording interval and synchronize the computer clock to the device. After finishing the data collection, use a USB cable to connect with a tablet or a laptop to read and analyze the data.



Check Highest & Lowest Temperature During Delivery

• This device implements a real-time clock which supports time-stamp function, and the user can use a RFID reader to read the highest and lowest temperature when the product is delivered from the starting point.

Use the MODAT-328/335/531 RFID reader to read the temperature to ensure the perishable product is not spoiled during delivery.



Applications and Industries

Data loggers are used in a wide variety of industries, especially in restaurants, catering, transportation and medical/vaccine storage. Basically, anywhere temperature is a critical factor in storage or transportation of goods, a temperature logger is useful. The RFID sensor tags data logger are ideal for keeping track of the following applications:

- Dry ice storage and transportation
- Food fridges and freezers
- Vaccine fridges
- Blood storage
- Freezing foods transportation
- Medical storage
- Environment monitor
- GPS tracking
- Machine abnormality



Medical Storage



Vibration Sensor

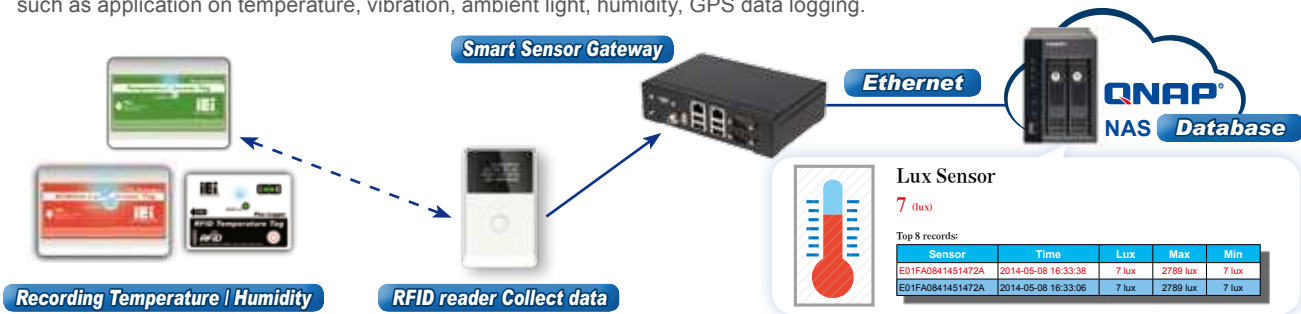


Freezing Food Temperature Monitor



GPS Tracking

Combining IEI HF RFID sensor Tag series and RFID tag reader with QNAP NAS, IEI can offer a total solution for Environment monitor such as application on temperature, vibration, ambient light, humidity, GPS data logging.



Ordering Information

| Part No. | Description |
|-------------------|---|
| RFID-TP-D-ST-R10 | Temperature sensor tag, data logger, 4GB storage, 0.5°C~1.0°C accuracy, 13.56MHz, ISO15693, USB 2.0 interface, RoHS |
| RFID-VB-D-ST-R10 | Vibration sensor tag, data logger, 4GB storage, ±3.9mg accuracy, 13.56MHz, ISO15693, USB 2.0 interface, RoHS |
| RFID-AL-D-ST-R10 | Ambient light sensor tag, data logger, 4GB storage, ±4 LUX accuracy, 13.56MHz, ISO15693, USB 2.0 interface, RoHS |
| RFID-HT-D-ST-R10 | Humidity and temperature sensor tag, data logger, 4GB storage, relative humidity ±2%, temperature ±0.2°C, 13.56MHz, ISO15693, USB 2.0 interface, RoHS |
| RFID-GPS-D-ST-R10 | GPS sensor tag, data logger, 4GB storage, <3m accuracy, 13.56MHz, ISO15693, USB 2.0 interface, RoHS |
| RFID-STP-D-ST-R10 | Slim temperature sensor tag, data logger, 107KB storage, 0.5°C~1.0°C accuracy, 13.56MHz, ISO15693, USB 2.0 interface, RoHS |
| RFID-TP-N-ST-R10 | Passive temperature sensor tag, data logger, 0.5°C~1.0°C accuracy, 13.56MHz, ISO15693, RoHS |

Optional Accessory List

| Item | Part No. | Description |
|-----------------|---------------------|--|
| Adapter power | 63040-290013-000-RS | Adapter Power;Powertron;PA1015-050SIB260;PA1015-050SIB260-838 V0;;Vin:90~264VAC;13W; Erp(NO LOAD 0.3W);Wall Mount/Switchover plug;Vout:5VDC;USB;CCL;RoHS |
| Power bank | 31603-000042-RS | Battery Pack;Li Ion;T-GEE;5811-TCTWMX312A;Maxcell;NA;6200mAh;3.8V;1S 2P; CCL;RoHS |
| RFID tag reader | RFID-ST-RD-R10 | RFID Sensor Tag Reader, 128x64 OLED, 107KB Storage, 13.56MHZ, ISO15693, USB 2.0 interface, 650mAh. |



Adapter power



Power bank



RFID tag reader



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