

#### 1. Electrical Features

Quiescent Current: less than 3mA

Working current: less than 15mA

Battery life: less than 4.5 years (service life: 20 years)

Working frequency: 3 times/seconds

## 2. Air Link Specifications

Modulation: GFSK

Baud Rate: two-way 1024Kbit/s

Working frequency: 2401~2480 MHZ

Output Power: less than or equal to 0dbm

Communication distance: less than 80 meters

Bit-error rate: 10-9

## 3. Pysical characteristics

Housing Material: PC-ABS

Outlook: 86×54×4mm

Weight: 25 g

Color: ivory by default

Protection grade: IP34

Installation: hanging or paste to surfaces

### 4. Working Environment

1) Working temperature:  $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$  (ML-T80 );  $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$  (ML-T801 )

2) Working Humidity: less than 85%

3) Storage Temperature:  $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$ 

4) Vibration:  $10\sim2000$ Hz, 15g for three axis

5) Free Fall: 1000mm to concrete ground, twice

6)Anti-electromagnetic interference: 10V/m  $0.1 \sim 1000MHz$  AM

#### 5. Product Features

Anti-collision: Advanced anti-collision technology, be able to identify more than 100 per second at the same time.

High-spped: The highest recognition rate can reach 200 km/h

Security: Encryption algorithm and certification to ensure data security, to prevent cracking with

the data link eavesdropping

Directivity: capable of identification of directional and omnidirectional

directional and omnidirectional

High reliability: Anti-collision in -40°C-85°C

Cost: all made of 0.18 uM chip, a lower cost

Transmission: Low frequency and high frequency are open microwave frequencies around the world, do not need to apply for and pay

High Noise Resistance: no special requirements to the field of various interference sources

### 6. Working Principles

Active identification card continuously sends out a radio signal actively(three times in one second, the sending power can be modified according to user requirements), and the ability to pass long distances, the wireless signal is encoded, each identification card code is exclusive. If id card issued by the wireless signal is in the effective measurement range, card reader, the antenna of the radio signal through the card reader will received and decoded by readers, then the reader sends the information to the management system or other monitoring and control system through the TTL232 / RS232 / RS485 / CAN bus/Ethernet/Wiegand - / Wiegand 26-34 / USB/GPRS.

#### 7. Precautions for use

- 1) Keep the surface of the label dry.
- 2) Stay away from places of many metals.
- 3) Keep it away from closed space.
- 4) Stay away from placed near corrosive goods.
- 5) Please use under normal working humidity.
- 6) Inspection shall not be arbitrarily change the parameters of the product components, specifications, models.
- 7) Tags can get wet in the rain, but don't soak it in water.

#### 8. Application Fields

The factory staff swipe cards automatically.

Access management.

Long-distance identification system

Automatic identification of personnel management system

# Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.