



**TTM-M210S**



MS



IC



RF

## TTM SERIES COMPACT MOTORIZED CARD READER

### Application

- Banking terminal
- Payment terminal
- Vending machine
- Kiosk
- Fare collection system

### Compact and reliable card reader of magnetic stripe and smart card

Pointman TTM series is a compact-size motorized card reader that is developed to reduce the dimension for space saving while providing high reliability and security as well. This card reader also offers accurate and secure reading of magnetic stripe and smart card data on cards for kiosks, payment systems, fare collection system etc.

Various security options such as anti-skimming, secure head and full shutter support a safe user environment which makes it easier to choose the right card reader.

It meets the ISO 7810, 7811 and 7816 specifications and it also has optional contactless smart card read and write capability for further demands on card functionality in the field.



### Features

- Magnetic ISO 1/2/3 track read
- IC card ISO 7816 read/write
- Optional contactless IC card read/write
- Data encryption with triple DES and single DES
- Full shutter preventing dust and any foreign objects
- Rear card capture
- RS232C or USB interface
- EMV Level 1 & 2 certified
- Optional anti-skimming

## Technical Specifications

### MAGNETIC STRIPE

- ISO 7810, 7811
- Track 1,2,3 Hi-co/Lo-co read capable

### CONTACT SMART CARD

- ISO 7816
- T=0, T=1 protocol
- EMV Level 1 & 2
- Optional SAM socket

### CONTACTLESS SMART CARD (optional)

- ISO 14443 type A & B
- ISO 15693
- ISO 18092 (NFC)
- Mifare
- other types upon request

### CARD SPEED

- 210mm/s+/-10% capability (at flat card)

### INTERFACE

- RS232C or USB

### POWER

- +12Vdc +/-10%, 2A

### LIFE TIME

- Unit : 1,000,000 passes
- Mag. Head : 500,000 passes
- Smart card contact : 300,000 contacts

### ENVIRONMENT CONDITIONS

- Operating Temperature : 5 ~ 50 °C
- Operating Humidity : 20 ~ 80RH
- Storage Temperature : -20 ~ 70 °C
- Storage Humidity : 20 ~ 80 RH

### DIMENSION

- 86mm (W) \* 43mm (H) \* 160mm/166mm (L)

### WEIGHT

- Less than 500 g

• Specifications are subject to change without notice

