TASHI

An Economy Versatile T&A Terminal

Time Management & Access Control Terminal

MT180 is an affordable device targeting Access control and Time management related vertical markets. It is application ready, parameters settings through management API and rich of command set. An optional built-in wireless module enables remote voice talk and remote controller such as door opening feature; it adds value on top of traditional entrance access control function either in home or office environment.

Network topology of MT180 can be configured as a stand alone device featuring terminal functions. Alternatively it can be cascaded with a group of MT180 and link with an OS base controller or PC to form a networked system. Physical connection can be configured through RS485 or 10BaseT/100BaseT (Ethernet).

Besides keypad password entry, MT180 is also equipped with variable types of Auto ID readers such as Proximity, Mifare and Finger Print, to provide a variety of choices of user ID verification solutions.

Main Features

- 128 x 64 pixels mono LCD screen with white LED backlight
- Built-in 125KHz Proximity, 13.56MHz Mifare, and Finger Print
- Wired communication Ethernet and serial ports (RS232/RS485)
- Optional voice communication and control via DECT
- Can connect secondary RFID reader via external RS232 interface
- Relay outputs, Digital I/O
- Store up to 40960 RFID cards
- Anti-pass back function to prevent abnormal entry or leaving
- Anti-threaten function mechanism
- Full time attendance supporting

MT180
Specifications

System Characteristics

- OS — Proprietary
- CPU — ARM7 core
- Flash ROM — 8MB
- Keyboard — 18 hard keys (12 numeric and 6 function keys)
- Display — 128×64 mono LCD with white LED back light

Power

- Power input — DC 12V/2A

Communication I/O

- RS485 — One
- Ethernet — One
- Relay — Two 1A @ 24V DC, 0.5A @125V AC
- Digital I/O — One digital input and one digital output
  (Extendable 3 digital input and 3 digital output)

Audio

- Buzzer
- Voice DECT module (with a DECT wireless phone hand set)

Auto ID Reader

- EM — 125KHz, Proximity
- HID — 125KHz, Proximity
- Mifare — 13.56MHz R/W
  (ISO14443A/B, ISO15693 or 14443A)
- Finger Print

Time Attendance & Access Control Application

- Supports data communication via Ethernet (default) and RS485 interface
- Supports secondary reader via RS232, secondary MT180 via RS485
- Ability to manage up to 40960 cards and store up to 32768 access logs
- Optional fingerprint modules: can store up to 7,000 fingerprint templates and be collected to server and then send to each terminal
- Forced open functioned by means of a hardware circuit, preventing mechanical failure
- Changeable installation position displays: allows displaying position name in 16-byte English/ Chinese characters
- In/out reader support: auxiliary secondary reader supports one door anti-pass back, preventing unauthorized access.
- Built-in magnetic anti-theft sensor: when the magnet moves away from the sensor, it triggers the alarm and provides real-time feedback, preventing illegally opening the terminal
- Individual password changeable in the reader and able to upload updates
- 128 anti-duress passwords: two for each user group
- Password door-open allowed for each card
- Supplementary password or fingerprint verification after card reading
- Online status control: real time monitoring on door-open, door position security, sensitive points, fingerprint sampling, digital input, and digital output
- Access control function: 1x door open trigger, 1x door position sensor, 1x electrical door lock relay, 1x anti-theft sensor, and secondary reader via RS232
- Able to open door remotely, enable/ disable security, reset controller
- Combination of permission sets: 128 periods, 64 groups, 8 holiday tables, 8 holiday types, weekly security plan, weekly long open plan, weekly door alarm disabling plan, weekly attendance plan, configurable shifts
- 256 sets of card-free, door-opening password arranged by time period
- Unique card serial number: allows controlling cards in general standard
- 16 shifts available, free to make combinations
- Automatic shift mode displays: depends on each time period, no need to do manual selection
- Same card detection: reduces duplicate entries, which occupy storage space
- Substitute clock-in via user number: configurable limit, either weekly or monthly
- Log query via serial number: a serial number assigned to each access/ attendance log, convenient to make query on lost record
- Built-in In-System Programming (ISP): allow no service interruption during firmware downloading
- Watchdog function: able to reset controller and log abnormal hardware operation