A Versatile MultiFunction











A Versatile Terminal With Camera Intercom for T&A Application

MT380 is a compact size as well as a small foot print IP based multi-function terminal with embedded Window OS, which targets mainly on Time & Attendance and Access Control applications. Since it is fully Window based programmable, can also be applied to many segments such as loyalty card, shop floor....etc.; a variety of other value added applications.

MT380 supports Ethernet or wireless WiFi high speed communications, equipping with QVGA display and large LED good read notification, supporting various Auto ID readers, such as finger print, HID/EM proximity, or MiFare read/write reader, and is with big numeric keypad as well as function keys.

MT380 is programmable through a software development kit, SDK, also an optional, comprehensive, and ready to use T&A application template is provided on the terminal and PC.

Hardware Main Features

- WinCE OS based operation
- Application reference template available for Time management, and Access control
- For specific application, a comprehensive SDK (Software Development Kit) is provided, it supports variety of I/O. driver function APIs, for example, communications, Auto ID reading, DI/O control... etc.
- Touch screen with 3.5" color TFT-LCD and QVGA (320x240) resolutions
- Built-in 125KHz HID/EM Proximity reader, 13.56MHz MiFare reader, or finger print reader
- Wired communication support USB (Host), Ethernet (PoE) and serial ports (RS232/RS485)
- Optional wireless communication support high speed wireless LAN 802.11b/g.
- Large good read dual color LED notification
- One SD open Slot
- 2 Relay outputs, 2 photo-coupler inputs
- Watch dog, Temper switch

WM9713 Codec

- Full duplex
- WAV/WMA/MP3 stereo
- 16-bits with 8KHz, 11KHz, 16KHz, 22KHz, 44.1KHz sampling rate
- Software control volume . 90dB up minimum at 10cm distance
- Touch panel interface (4 wires)
- PCM/ I2S voice codec support

Speak output

- Output Amplitude 1V RMS with 1W
- THD+N 80dB
- 10cm distance speak loud > 70db

Microphone input

- Sensitivity: -42dB
- S/N rate: 60dB
- Mic input with Echo canceling function

Interface Connectors

Image Sensor I/F

- Support Micron CMOS 2.0M pixels resolution
- Min. 5 Lux
- YCrCb data format

Carrier Board Features

- Audio CODEC
- Camera CMOS sensor 2.0M pixes
- GoForce 4800 Media Processor for image (Video IP)
- Microphone input
- Video IP (H.263, MPEG4 formats)
- Camera White-LED illumination function



MT380 Specifications







System Characteristics

• OS WinCE Professional • CPU Intel PXA 270CE520 Mhz

• FlashROM 64MB • SDRAM

 Keyboard 17 hard keys (12 numeric and 5 function keys) • Display 3.5" color TFT-LCD QVGA (landscape 320x240)

with touch screen function

Power

 Power input DC 12V/2A

· Mini UPS One rechargeable Lithium-ion battery with @ 3.7V,

1200mAH for 2 hours operation and 3 days backup

Communication I/O

• RS232 One D-Sub 9-pins support DCD, TXD, RXD, CTS,

RTS, DTR, DSR & GND

• RS485 One RJ45 support TX+, TX-, RX+ & RX-

• Ethernet One RJ45 with PoE (DC 5V/2A)

• USB v1.1 Host

Two 2A/30Vdc, 0.5/250Vac • Relay • Digital input Two photo-couplers $(3.3V \sim 12V)$

PS: RS232/RS485 either one by S2 switch selection.

Expansion

• SD slot For storage

Auto ID Reader

• EM Proximity 125kHz • HID 125kHz MiFare 13.56MHz

(ISO14443A only or ISO14443A/B & ISO15693)

• Finger print

Outline and Appearance

 Dimension 228 mm (L) x 100 mm (W) x 35 mm (H)

• Weight 485g

Construction Characteristics

• Speaker (0.8 /2 Watts) & microphone

• 2.5 Micron CMOS camera with 2.0M pixels resolution

LED Indication

SDK, Middleware

- · Data communication via Ethernet or RS485
- Secondary reader supported by RS232/485
- Supports 3 languages display: English, Traditional Chinese (Big5), and Simplified Chinese (GB)
- Manages up to 40,000 cards, stores up to 44,000 access logs
- Optional fingerprint modules support up to 7,000 fingerprint sampling
- Single entry in/out card reader supports Anti-Pass Back (corresponding in/out access control to prevent re-entry or exit)
- · Different passwords allowed for one card
- · After using card reading, you can simultaneously use password or fingerprint verification
- · Built-in burglarproof sensor to prevent illegally terminal opening
- Online status control in real time (door-opening, security, all sensitive points, fingerprint sampling, DI, DO)
- Remote door-opening, security-enabling, security-disabling, controller-resetting
- Authority combination setting: 128 periods, 64 groups, 8 holiday tables, 8 holiday types, weekly security plan, long-term weekly plan, door open alarm weekly plan, attendance weekly plan, manual change of work shift
- 256 card-free, password to open door coordinates with periods
- · Communication protocol for management side and reader adopts international standard for high security: Triple DES (3DES) encryption technology
- Card control by unique serial number allows normal card application
- 16 work shifts, free to make combinations
- · Same-card detecting function reduces repeat log records occupying your storage space
- Substitute clock-in via user number, simultaneously allows times configuration

Software/Programming

• TASHI SDK API

• C#, VB.NET, C++

Physical and Environment

• Temperature Operation 14°F~122°F(-10°C~50°C) • Temperature Storage $-4^{\circ}F \sim 140^{\circ}F(-20^{\circ}C \sim 60^{\circ}C)$

· Humidity 5% to 95% RH non-condensing