# **X**FAMILY

Time & Attendance and access control terminals with **WEB interface** 

X1, X2 and X3 are web-based time & attendance and access control terminals that combine compactness and robustness with functionality, technology and design.

The **X1**, **X2** and **X3 terminals are multifunction devices for time &** attendance and access control applications, suitable for every type of work environment, even outdoor.

# ready to use

# WEB interface

X1, X2 and X3 terminals are completely configurable and manageable via web (configuration parameters, cards, users with name, authorisations, review of transaction records, configuration of access points, etc.).

# Ready to use

All the time & attendance and access control functions are already integrated and can be .configured via web (time slots, reason codes, sirens, transit with PIN, whitelist, etc.)



# operating modes

The terminal can manage the access point connected to it in two ways:

- **OFFLINE:** using tables stored in the internal file system (SD 4 GB);
- ONLINE HTTP: exchanging HTTP messages in real time with a server that governs the access point, validates the badge, displays messages and controls all the other functions of the terminal.

The terminal and user functions can be configured and managed:

- via WEB through a browser, thanks to an intuitive interface;
  by the sending of text files (even via FTP).
- The basic parameters can also be configured directly from the supervisor menu of the terminal.



# **XFamily features**

# Integrated management of access points

X1, X2 and X3 are able to completely manage all statuses (alarm, break in, forced lock, transit that did not occur, etc.) of a door or turnstile.

# Wide range of I/O and high security

- 1 relay on board (for door opening or siren activation at programmable times);
- 2 inputs on board;
- Expandable I/O via optional boards which can be installed in a protected area making relays and inputs inaccessible and thus guaranteeing the safe management of the controlled access point.
- X1 and X2: up to 2 optional NeoMAX boards (each with 2 relays and 2 inputs) which can be connected to the RS485 port for a total of 5 relays and 6 inputs, for the complete management of a door or turnstile.

 X3: up to 8 optional boards in combination of I/O, readers and keypads. Installing only FD-NeoMAX there is a total of up to 17 relays and 18 inputs, for the complete management of 8 doors or 4 turnstiles.

#### Up to 3 readers can be connected

An internal reader and two external readers. One of the readers can be biometric with fingerprint enrolment capacity directly from the terminal (via FingerBox applied under the terminal). Configurable reader interfaces: Clk&Data, Serial, Wiegand. The tracking and decoding of each reader can be defined independently.

# Does not require a middleware in small installations

The customisable record format and ability to automatically send transaction records to the FTP server in a scheduled manner allows X1, X2 and X3 to be used directly with any software.

# Ethernet 10/100 POE 802.3.af and Battery

One cable for data and power supply.Up to one hour of operation with no power.

# External USB 2.0 port

For copying transaction records to a memory stick; password protected.

#### Standard communication protocols

HTTP and FTP. HTTPS only on X3. X1, X2 and X3 do not require DLL for integration.

#### **GPRS** modem

A version with integrated GPRS modem is available for all models.

**X1** 



# other advantages of the X3

# **Touch Screen**

With the same compact size as its predecessors, X3 has not only a numeric keypad but also a touch-screen interface making use more intuitive.

#### Color graphic display

The large 4.2" color display with resolution 480x272 pixel offers detailed, well-defined reproduction of the screens, to view the transactions and enter the selectable reasons with a simple touch.

### Integrated access point management

X3 manages all states (alarm, breach, forced lock, failed pass, etc.) of 8 swing doors or 4 turnstiles via the 8 optional boards.

#### Multiple access point management

X3 is able to fully manage a multi-access point control system, with a wide range of optional devices which can control, individually or in combination:

- FD-NeoMax (with 2 relays and 2 inputs and a connector for 1 reader);
- FD-RFID4K (RF reader with numeric keypad for PIN, IP65 and knock-resistant);
- FD-RFID4 (RF reader, IP65 and knock-resistant);
- XFinger (biometric fingerprint reader);
- AX BIO (biometric reader with button for b Ticino electrical box)
- AX RF (RF reader with button for b Ticino electrical box).

#### Standard communication protocols

HTTPS to guarantee safe and encrypted communication with the server.

# RF5 multi-technology reader

X3 features the RF5 multi-technology reader, able to read the following cards:

- 125 kHz EM4102 and compatible,
- 13.56 MHz Mifare: Ultralight, Classic 1K, 4K, Classic EV1 1K, DESFIRE.
- 14443A
- tag NFC Forum Type2.

The RF5 Reader can be configured for one-way use (entry or exit) or two-way use (entry and exit on two ends of the reader). X3, simultaneously reading 125 kHz and 13.56 MHz technology, provides significant benefits in mixed technology environments or when changing card technology.





#### **KEYBOARD**

- 6 membrane function keys on the sides of the display.
- X2: 10 numeric keys + 6 membrane function keys for PIN transactions.
- X3: (12) membrane numeric keys.

# **AUXILIARY READERS**

- 2 external of which one can be Biometric (optical or capacitive).
- Biometric reader: 9590 template Operation in IDENTIFICATION 1:N or in VERIFICATION 1:1 with templates in the memory of the terminal or on the RFID card.
- X3: Other readers (maximum 8) can be connected to the RS485 port including XFinger biometric readers.

# **INPUT/OUTPUT DEVICES**

- 1 internal relay 1A, 30V DC (resistive load), can be used for programmed activations (siren) or for unlocking an access point.
- 2 internal digital inputs.
- Expandable Inputs and outputs via optional RS485 boards:
- X1 X2: up to 5 relays and 6 inputs 2 via optional NeoMaX;
- X3: up to 17 relays and 18 inputs via 8 optional boards FD-NeoMAX Power Supply.

# MEMORY

• Over 20 million transactions and over 100,000 users.

# **AUDIO & VIDEO**

• multi-tone buzzer.

#### DISPLAY

- X1-X2: Transflective, affords excellent visibility even in full daylight 128x64 with white LED, up to 7 lines and 24 characters.
- X3: 4.3" 480x272 back-lit LED display resistive Touch screen.

# **COMMUNICATION PORTS**

- Communication: TCP/IP, HTTP and FTP.
- 1 Ethernet 10/100 POE A&B compatible with standard HTTP and FTP protocols (X3 also HTTPS).
- External USB host 2.0 full-speed, password protected for copying timestamps.
- 4 GB MicroSD card (over 10 million transactions and over 100,000 users). In case of failure of the terminal, it is sufficient to insert the MicroSD in a new terminal to restart with the same data and configuration.
- 1 serial RS232 at EIA levels.
- X1 and X2: 1 RS485 with NET92 protocol to expand the number of I/O connecting up to 2 NeoMAX.
- X3: 1 RS485 with NET92 or SPP protocols to expand the number of I/O readers connecting up to 8 optional devices - RF readers, biometric readers or I/O board.

# PHYSICAL CHARACTERISTICS

- Protection: IP55.
- Housing material: ABS VO.
- Dimensions: 120x130x52 HxWxD -Weight: 400g.
- Operating temperature: -10 +50 (the battery must not exceed 50°).

# BATTERY

• 1 hour of continuous operation with option of automatic power-off management.

# **INTEGRATED READERS**

Internal RFID reader in all technologies supported by Zucchetti AXESS:

- 125 Khz EM4102 compatible (dual-head);
- 125 KHz HID;
- HID iClass;
- DESFIRE (NO SAM secure access module);
- 13,56 MHz multi-standard Reading and Writing ISO14443/15693/Mifare;
- Legic Advant read-only.

X3: Built-in RF5 multi-technology reader, able to read the following cards:

- 125 kHz EM4102 and compatible
- 13.56 MHz Mifare: Ultralight, Classic 1K, 4K, Classic EV1 1K, DESFIRE
- 14443A
- Tag NFC Forum Type2
- BLE (Bluetooth Low Energy)

# SOFTWARE

- Data collection application for access point control and integrated attendance control.
- Stand Alone operation.
- Online with an HTTP server.
- As a component of the XAtlas system.
- FTP server for receiving configuration files.
- Client FTP for automatically copying the transits on an FTP server in text format.
- X3: Integrated management of independent access points (maximum 8 swing doors or 4 turnstiles) via optional boards.
- X3: Client FTP and possibility to automatically recover configuration files and tables.

# POWER SUPPLY

• PoE 802.3.af or with power supply from 9 to 50 Volt.

