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Symbols

Mifare  Exit Device  Working Temp.  Humidity  Working Voltage  IP Rating
Web Access - Introduction

Full access control via the Internet, wherever you are and with any device: mobile phone, tablet or computer.

We make it easier to control your access control needs, ideal for houses, offices, businesses, schools, hospitals...

Take control from anywhere and at anytime.

- Capacity for 2500 users.
- 250 access groups.
- 50 weekly schedules.
- Stores the last 50,000 events.
- Air-lock function.
- Anti-passback function.
- Anti-passback time function.

- 10 operators (with one specially dedicated to the installer for the remote maintenance of the system).
- Import users.
- Export events and users (CSV format).
- Easy saving of data: on a USB Key, in the WS4-E internal memory (daily), or on the user interface.
Main Advantages of the System

- The entire access system can be accessed and managed from anywhere in the world with an internet connection.
- Very easy to install and to use with an intuitive and ergonomic interface.
- Once installed, the system is 100% stand alone.
- Choose from 1, 2 or 4 door controllers and Mifare proximity readers or combined keypad & Mifare proximity readers.
- Expand up to 20 doors.
- Manage up to 2500 users and 250 access groups (categories) via the LAN or remotely using secure communication HTTPS (all data between the controller and web browser is encrypted).
- DynDNS, a fixed IP address is not required.
- Universal “plug & play” (UPnP) is supported.
- Port forwarding can also be setup if required.
- The readers communicate with RS485, establishing a bi-directional communication between the readers and the WS4 controller thereby reducing the number of wires required for the installation.
- The WS4 controllers have a TCP/IP Ethernet connection (10/100/1000 Base-T – HTTP or HTTPS).
- The power supply is located in the control cabinet (WS4CU1 : 1 door cabinet, WS4CU2 : 2 door cabinet, WS4CU4 : 4 door cabinet).
- Adaptive web format feature (Responsive Web Design) that adapts to the format of your device.
- Can be used with all types of devices: PC, MAC, Android Smartphone, iPhone, Tablet and iPad.

Complete visualization of the status of the system at a glance

You will be able to quickly setup and check all the following details:

- The status of the doors and the readers.
- The battery and power supply status.
- The presence or absence of alarms.
- The system date and time.
- The number of operators connected to the controller.
- Setup email alerts to inform a manager or engineer, including a system “health check” email schedule.
- Allocate different types of event reports to engineers and administrators (e.g. reader offline, power issues to an engineer and/or door open too long events to a manager).

Available in English, French, German, Spanish, Dutch, Italian, Portuguese and Danish.
Simple and efficient programming for users and user access

The main menu gives direct access to the user list. Creating and modifying users is then accessible. The list of information displayed can be configured. Users can be imported from an existing CSV file and exported if required.

**Users (2500)**

For adding, editing and deleting,
- The username (name and surname).
- Up to 5 customizable fields.
- Authorized dates and times.
- 3 categories (access levels).
- Up to 2 fobs/cards and an access level per user.

Users may be de-activated in a single click.

**Categories - Access Levels (250)**

Setup access levels for groups of users.
- The category name (access group).
- The doors for which this category has access.
- The timeband during which access is allowed.
- 2 override options:
  - Blocking during forbidden periods.
  - The anti-pass-back function.

**Schedules - Timebands (50)**

Define periods during which access is allowed. There is a timeband for each day of the week and a timeband for holidays. 3 active periods can be set for each daily timeband.

**Holidays - Calendar**

One off and annual holidays can be set, for example public holidays. On these dates the active timeband for holidays takes priority over the actual days access level.

**Operators (10)**

A list of 10 operators is available. 1 of 4 rights can be assigned to each operator.
- Total control (Administrator).
- Equipment installation.
- Access control management.
- System monitoring.
Monitor the system, this screen shows the status of the system.

General information
- Power supply status.
- Power supply voltage input level.
- Tamper status.
- The status of the configuration dip-switches.
- Internal memory usage.

For each door
- The status of the push button.
- The status of the door contact.
- The control status of the lock.
- Connection status of the readers.

For inputs and outputs
- The status of the inputs.
- The status of the outputs.

Settings
The settings screen provides access to various features.
- Network configuration.
- Date and time.
- “System” options.
- Reader configuration.
- Auxiliary inputs and outputs.
- “User” options.
- Backup and update.
- Restore.
- Firmware update.
- System log.
- Email alerts.
Also available to help manage the WS4 system on the move over secure HTTPS communication is the new WS4 mobile app offering the following features:

- Manage users (adding, editing and deleting).
- Manage multiple sites.
- Open doors (either momentary or timed), close doors.
- View events.
- Receive alerts (door open, alarms and power issues).

The WS4 mobile app is available for both Android and iOS devices and can be downloaded from Google Play or the App Store.

The presence of a door contact makes it possible to activate an alarm, either in the event of a breach or in the event of a door being opened for too long. Readers are also monitored, for instance, in the event of a short circuit or interruption of its connection, an alarm is activated. There are different door combinations depending on the controller required.

### Door programming

- **WS4CU1**
  - 1 Possible Combination:
    - 1 door with 2 readers, for entry and exit.

- **WS4CU2**
  - 2 Possible Combinations:
    - 2 doors with 1 reader and 1 push button.
    - 1 door with 2 readers, for entry and exit.

- **WS4CU4**
  - 3 Possible Combinations:
    - 4 doors with 1 reader and 1 push button.
    - 2 doors with 2 readers, for entry and exit.
    - 1 door with 2 readers, for entry and exit, plus 2 doors with 1 reader and 1 push button.
Readers and Exit Devices

**MTPADPBK-RS-MF**

Keypad and Mifare Proximity Reader
This combined keypad & 13.56MHz Mifare reader, in black ABS, offers double security: via code and via fob/card. It can be installed either internally or externally. It comes with an RS485 bus and has a backlit keypad. It's LEDs, tamper and buzzer are managed directly by the WS4 controls. It can read Mifare Classic, Desfire & Ultralight fobs/cards.

**MTPXPK-RS-MF**

Mifare Proximity Reader
A compact 13.56MHz Mifare reader in a black ABS housing incorporating a rectangular “halo” tri-colour status indication LED. It has been designed to be installed either internally or externally and has an RS485 bus. It’s tri-color LED, tamper and buzzer are managed directly by the WS4 controls. It can read Mifare Classic, Desfire & Ultralight fobs/cards.

**MTTBK-EXIT**

Touch Sensitive Exit Button
The MTTBK-EXIT is a touch sensitive push to exit button and is entirely electronic, non-mechanical and is an ergonomically designed access control device. It can either function as an independent manually controlled push button or alternatively, be connected to a WS4 series controller to facilitate the exit from a secure area.

Accessories - Fobs and Cards

A selection of Mifare Classic 13.56MHz fobs and cards are available:
Mifare Classic MS50 (1K memory) Fobs & Mifare Classic MS50 (1K memory) Card

PBX-1E-MS50
Grey ABS keyfob, Mifare Classic, 1K memory.

PBXB-1E-MS50
Blue ABS keyfob, Mifare Classic, 1K memory.

PBXBB-1E-MS50
Black ABS keyfob, Mifare Classic, 1K memory.

PBXG-1E-MS50
Green ABS keyfob, Mifare Classic, 1K memory.

PBXR-1E-MS50
Red ABS keyfob, Mifare Classic, 1K memory.

PBX-2-MS50
0.75mm thick ISO card, Mifare Classic, 1K memory.
Controllers - WS4 Control Cabinets

There are 3 controllers to choose from depending on the system requirements:

- **WS4CU1**: 1 door control cabinet.
- **WS4CU2**: 2 door control cabinet.
- **WS4CU4**: 4 door control cabinet.

All controllers can be combined up to 20 doors if required. There is no need to install or download any special software as communication is carried out directly with the controller through a web browser.

Also there is no need to have a dedicated PC either. Everything is available online once the operator has registered with the controller using its unique serial number (located on the internal software chip).

### Minimal hardware required

Each control unit includes the appropriate WS4 control pcb housed in a lockable powder coated steel cabinet (CAB2). They also include an intelligent power supply with full battery discharge protection and protection of power supplies against short circuits. Sufficient space for a rechargeable 12Vdc/7Ah battery is also available.

The management electronics of each WS4 control pcb is based on a powerful microprocessor with a Linux kernel.

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**CAB2 Cabinet Specification**

- Materials: Powder coated steel
- Operating temperature: 0 °C to +50 °C
- Dimensions (mm): 360 (W) x 265 (H) x 75 (D)
- Humidity: 0% to 85% (non-condensing)

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**WS4CU1**

The **WS4CU1** contains a WS4-1D-E control pcb with easy access to the pcb terminals and a 14.2Vdc, 3.2A switched mode PSU.

1. Space for rechargeable 12Vdc/7Ah battery.
2. Door 1:
   - Input for door contact and push button.
   - Direct output for latch/lock with 12Vdc - 600mA power supply.
3. RS485 reader connection
   - Max. current per reader: 225mA.
   - Reader power supply voltage: 12Vdc.
4. TCP/IP Ethernet connection: 10/100/1000 Base-T - HTTP or HTTPS.
5. Processor
   - ARM A5 - 528MHz.
   - Memory 64MB RAM DDR2 133MHz.
   - Built-in clock (RTC) - continues for up to 4 days without power.
6. USB Port for backup on USB drive.
7. Power and Battery inputs
   - 12Vdc power input terminals.
   - 12Vdc/7Ah backup battery input terminals.
8. 14.2Vdc, 3.2A PSU (230-240Vac, 50/60Hz mains input).
**WS4CU2**

The **WS4CU2** contains a WS4-1D-E control pcb fitted with a WS4-EXT extension pcb and has easy access to the pcb terminals and a 14.2Vdc, 3.2A switched mode PSU.

1. Space for rechargeable 12V / 7Ah battery with reverse polarity protection. Low battery detection and anti deep discharge.

2. Door 1:
   - Input for door contact and push button.
   - Direct output for latch/lock with 12Vdc - 600mA power supply.

3. Door 2:
   - Input for door contact and push button.
   - Direct output for latch/lock with 12Vdc - 600mA power supply.

4. RS485 reader connection (for doors 1 and 2)
   - Maximum current per reader: 225mA.
   - Reader power supply voltage: 12Vdc.

5. 3 auxiliary relay outputs
   - Alarm activation feature.
   - Storing/memorizing alarm status.
   - Presence indication of at least 1 user in the area.

6. 2 auxiliary inputs
   - Emergency input (e.g. break glass).
   - Vehicle detection ground loop.

7. TCP/IP Ethernet connection, 10/100/1000 Base-T - HTTP or HTTPS.

8. Processor
   - ARM A5 - 528MHz.
   - Memory 64MB RAM DDR2 133MHz.
   - Built-in clock (RTC) - continues for up to 4 days without power.

9. USB Port for backup on USB drive.

10. Power and Battery inputs
    - 12Vdc power input terminals.
    - 12V / 7Ah backup battery input terminals.

11. 14.2Vdc, 3.2A PSU (230-240Vac, 50/60Hz mains input).
WS4CU4

The WS4CU4 contains a WS4-E control pcb and has easy access to the plug-in terminals and a 14.2Vdc, 5A switched mode PSU.

1. Space for rechargeable 12V / 7Ah battery with reverse polarity protection. Low battery detection and anti deep discharge.
2. Doors 1 and 2:
   • Input for door contact and push button.
   • Direct output for latch/lock with 12Vdc - 2x 600mA power supply.
3. Doors 3 and 4:
   • Input for door contact and push button.
   • Direct output for latch/lock with 12Vdc: 2x 600mA power supply.
4. RS485 reader connection (for doors 1, 2, 3 and 4)
   • Maximum current per reader: 225mA.
   • Reader power supply voltage: 12Vdc.
5. Processor
   • ARM A5 - 528MHz.
   • Memory 64MB RAM DDR2 133MHz.
   • Built-in clock (RTC) - continues for up to 4 days without power.
6. 2 auxiliary inputs (to be programmed as desired)
   • Evacuation contact (door release).
   • Emergency input (e.g. break glass).
   • Vehicle detection ground loop.
7. 2 auxiliary outputs (to be programmed as desired)
   • Alarm activation feature.
   • Storing/memorizing alarm status.
   • Presence indication of at least 1 user in the area.
   • Alarm bell activation.
8. Power and Battery inputs
   • 12Vdc power input terminals.
   • 12V / 7Ah backup battery input terminals.
9. USB Port for backup on USB drive.
10. TCP/IP Ethernet connection, 10/100/1000 Base-T - HTTP or HTTPS.
11. 14.2Vdc, 5A PSU (230-240Vac, 50/60Hz mains input).
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