The Field Devices allow creating a physical interface between the XAtlas server (D or E version) and the environment to control, in a manner that is both flexible and modular.

The Field Devices of the XAtlas server allow detecting states, identifying users and controlling equipment.

A wide range of devices can be selected in order to meet various needs:

- **application** (only access control, access control and time and attendance, intrusion detection systems, etc.);
- **target environment** (indoor or outdoor);
- **identification technologies** (magnetic cards, proximity cards, smart cards and biometric measurements);
- **detection technologies** (volumetric or perimeter sensors).

The Field Devices connect via a **RS485 data bus** to Field Processors (FM, XPoint touch, Xpoint Glass) on which they depend for their online operation.

Some FD models are also available in Ethernet version thus eliminating the need for RS485 cables.

It is also possible to connect third party peripherals to provide the best solution for any requirement of Time and Attendance, Access Control or Intrusion Detection.
**Field Devices**

**FD-RFID4K** – Card reader with integrated keypad – IP55
RS485 module with MIFARE reader and 12-key membrane keypad
Allows only PIN, only badge, badge+PIN transactions

**FD X1 – FD X2 Readers** with graphic display, I/O and keypad – IP55
A RF card reader, graphic display, keypad, 2 digital inputs and one relay all in one device.
Available in 2 versions: With 10-key numeric keypad for transactions with PIN and 6 function keys (FD-X2) or only with 6 function keys (FD-X1).
Each version is available with different proximity card reader technologies integrated: MIFARE®, HID® 125Khz; EM4102 (125 KHz Unique); Logic® Advant; HID® I-Class. Possibility to integrate a magnetic or biometric barcode reader (FingerBOX with capacitive/ optical sensor) fixed to the bottom of the device with a special bracket.

**FingerBOX** – Optional biometric reader for FD X1 or FD X2
Stores up to 9500 templates.
Operating modes: - verification:
Allows the enrolment of fingerprints which are stored in the XAtlas software and then distributed selectively to other biometric readers.
Available with optical or capacitive sensor

**XFinger** – Biometric reader with optical sensor, buzzer and LEDs – IP65
Available with integrated MIFARE reader or without reader
Stores up to 9500 templates received from XAtlas (local enrolment is not possible)
Operating modes:
Identification: finger only (1:N)
Verification: card+finger (1:1) even with template stored on badge
Card only
Also suitable for outdoor use – Optical Sensor

**FD AX BIO / FD AX RF** – Built-in MIFARE reader with button, buzzer, circular LED, relay
Available with only MIFARE reader (FD AX RF) or also with integrated optical biometric reader with 9500 templates (FD AX BIO).
The operating modes of the biometric version are the same as XFinger with MIFARE reader. Also in this case, enrolment is not possible.
It can pilot a bell. Also suitable for outdoor use.

**FD-DA0x** – Module with 8 inputs and 4 relays
Sends the state of the sensors to the XAtlas software in real time.
It can control electric locks, turnstiles, lights, alarms, sirens, etc.
The function of each input or relay can be assigned independently by XAtlas.

**FD-GA03** – FD-DO03 – FE GA03 – FE-DO03 – Modules with inputs, relays and interface for readers – RS485/Ethernet version
FD-GA03: 8 balanced inputs, 4 mechanical relays, 2 connectors for readers with LED. RS485 connection
FD-DO03: 2 balanced inputs, 2 mechanical relays, 1 connector for reader with LED. RS485 connection
The homologous FE versions have the same I/O devices as the FD version, but with an Ethernet connection instead of a RS485 connection.
Other FD devices can be connected to the RS485 port of the FE versions, thus reducing or eliminating the 485 cables.

**FE-GA04 FE-DO04** – Modules and Gateways for Aperio Wireless Offline Locks
FE GA04: 8 balanced inputs, 4 mechanical relays, 2 connectors for readers with LED.
FE DO04: 2 balanced inputs, 2 mechanical relays, 1 connector for reader with LED.
Ethernet connection to the XAtlas system
An Aperio HUB can be connected to the RS485 port for piloting up to 8 online wireless locks.

**FD-WB01** (FD-NeoMAX)
2 inputs, 2 relays that can be assigned independently by the XAtlas server
1 connector for reader with Wiegand or Clock&Data interface
RS485 connection to the Field Processor.