

Solutions catalog

ADATIS



Biometry, Access Control, Intercom



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3D facial recognition based on Deep Learning and Artificial Intelligence.

Smartphone-like user experience for your entrance.

High-end biometry and intercom for residential and commercial applications.

We are specialists in the development of biometric access control solutions. Benefit from our many years of experience in video processing and our focus on 3D facial recognition.

We are working on next-generation access control systems and intercom solutions, naturally with flexible network connection and also via existing two-wire lines.

Biometry will be an integral part of many systems in the future - we are already working on this and develop innovative solutions for you. Our systems identify you fully automatic. Any other credential can be combined with facial recognition for even higher levels of security.

In this catalog we have compiled an overview of our standard product offering. Please do not hesitate to call on us for custom or OEM solutions. We like challenges and thrive on exceeding your expectations.

Adatis - we turn innovative ideas into embedded products.



Commercial

The commercial market comprises single enterprises up to a commercial campus. The emphasis is on access control, security and visitor communication.

Companies expect a flagship experience at their entrance: Our terminals cater for multi credential access control, adaptable levels of security, visitor communication, and seamless integration into existing access control management system. Other criteria are modern, touchscreen based design and a high level of customization with company logos and user pictures.

- ❖ Full integration into Voice-over-IP PBX
- ❖ Customizable with company logos
- ❖ Multi factor authentication
- ❖ Biometry



Residential / MDU

The residential market caters for single family homes or even large MDUs. The emphasis is on door communication and access control for inhabitants.

Residential applications demand contemporary design and unprecedented flexibility for the diverse needs of the users: Required are an almost infinite number of ring buttons with custom pictures and individual phone books per unit. Also, the integration into modern home automation systems and the world-wide accessibility via cell phone apps are mandatory.

- ❖ 2Wire Full integration into Voice-over-IP PBX
- ❖ Any number of ring buttons
- ❖ Mobile Apps
- ❖ Management interface



Terminal Management

Any installation with more than a single unit requires an efficient management, with data import and export capabilities and with integration into facility management systems.

A linux server with a centralized SQL database facilitates a consolidated configuration and user management of all terminals in the network. The server is accessed via any web browser and can also be placed in the cloud.

- ❖ RESTful API for integration
- ❖ SQL-based databases
- ❖ XML/RPC based client and server Interfaces
- ❖ Cloud based management



AI - Neural Networks

Face recognition is expected to be the dominant biometry technology in the future, thanks to the unobtrusive operation and the high level of security, especially when combined with 3D.

Artificial Intelligence (AI) technologies allow for recognition rates of 99,38% (LFW benchmark). But computation requirements are high especially for large number of users/faces. The centralized server brings facial recognition to all terminals or even IP-cameras in the network. The server allows for databases comprising of up to 10,000 unique faces.

- ❖ Neural Network trained on faces
- ❖ NVIDIA Jetson based server
- ❖ Interfaces our terminals or any IP-camera
- ❖ Centralized data management (GDPA)

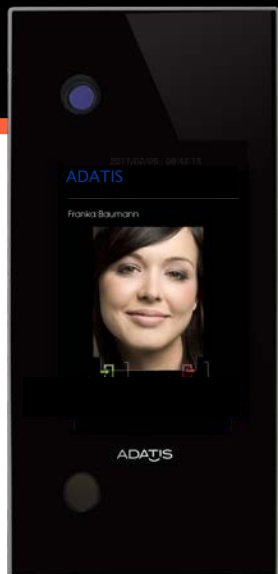
FACEENTRYXT / TOUCHENTRYXT



XT-Series - Key Features

- ❖ Outdoor Intercom and Access control unit
- ❖ Surface mount or true flush mount
- ❖ 7" touch screen, sunlight readable & ultra wide viewing angle
- ❖ Weatherproof touch, works in the rain
- ❖ Flexible GUI with groups / phonebooks
- ❖ Search capability
- ❖ 5 Megapixel camera
- ❖ 130° fisheye lens with panorama view
- ❖ Electronic pan/tilt/zoom
- ❖ 4W audio power
- ❖ PIN code entry
- ❖ Custom screen saver with date/time or street address
- ❖ Integrated RFID reader with BLE
- ❖ Ethernet with Power-over-Ethernet
- ❖ 2Wire connection (optional)
- ❖ Simple Time & Attendance function
- ❖ Fully SIP compliant
- ❖ With 2D or 3D (optional) facial recognition

FACEENTRYXS / TOUCHENTRYXS



XS-Series - Common Key Features

- ❖ Indoor or outdoor unit
- ❖ Surface or flush mount
- ❖ 4,3" touch screen, sunlight readable & ultra wide viewing angle
- ❖ Weatherproof touch, works in the rain
- ❖ Ethernet with Power-over-Ethernet
- ❖ 2Wire connection (optional)
- ❖ PIN code entry
- ❖ Custom screen saver with date/time or street address
- ❖ Simple Time & Attendance function
- ❖ RFID reader with BLE (optional)

FaceEntryXS-Features

- ❖ Biometric Access control unit
- ❖ With 2D or 3D (optional) facial recognition
- ❖ Enrollment capability
- ❖ Reader Mode for integration
- ❖ NO intercom function - pure access

TouchEntryXS-Features

- ❖ Intercom unit
- ❖ Flexible GUI with groups / phonebooks
- ❖ 1.3 Megapixel camera
- ❖ 180° fisheye lens with panorama view
- ❖ Electronic pan/tilt/zoom
- ❖ 4W audio power
- ❖ Fully SIP compliant

FACEUP / TOUCHUP

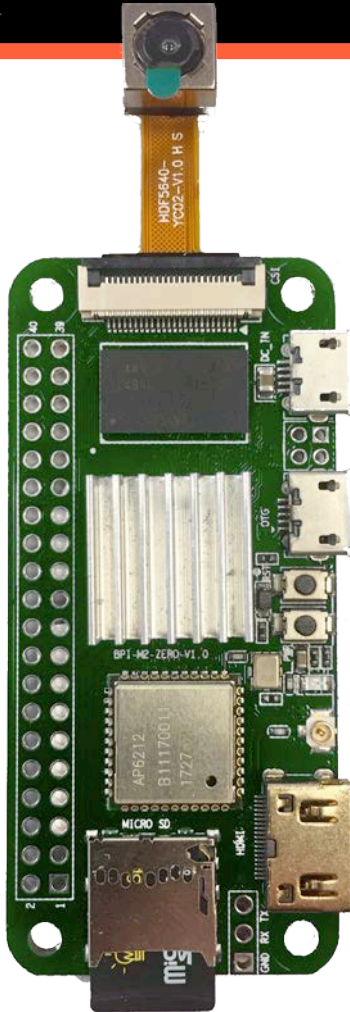


UP-Series - Key Features

- ❖ Indoor Access control unit - stand-alone or server mode
- ❖ Fits in standard flush mount box
- ❖ Black or white glass frame (GIRA Esprit)
- ❖ Fits with standard switch series with 55mm opening
- ❖ Facial Recognition (FaceUP only)
- ❖ Stand-alone mode: local data base with up to 1000 enrolled users
- ❖ Server mode: remote data base with >1000 enrolled users
- ❖ RFID/NFC 13.56 MHz (MIFARE, LEGIC, iCLASS)
- ❖ Bluetooth Low Energy (BLE)
- ❖ PIN-code: RGB-backlit touch sensor keypad
- ❖ Color camera for logging and surveillance
- ❖ Communication option:
 - Ethernet with PoE (802.3af)
 - 2Wire up to 500m over existing wires (optional)
 - 230 V power-line-communication (HomePlugAV) (optional)
- ❖ Interfaces:
 - Wiegand/RS485 output
 - Relay C-form
 - 2 trigger inputs
- ❖ User interface via backlit keypad:



FACEENTRYOEM



FaceEntryOEM - Key Features

- ❖ Self contained biometry engine with facial recognition
- ❖ Based on latest neural network technology: deep learning
- ❖ XML/RPC based API
- ❖ Serial API
- ❖ Internal data base for up to 5000 users/faces
- ❖ Local enrollment
- ❖ Compact board (65 x 30 mm) with wide-angle camera
- ❖ Interfaces:
 - WIFI & Bluetooth
 - Ethernet 10/100
 - USB
 - HDMI
 - +5V 2A power supply
 - RS232 (TTL)
 - SPI
 - GPIOs
- ❖ Custom layout or other option on request

COMMANDCENTER

CommandCenter - Key Features



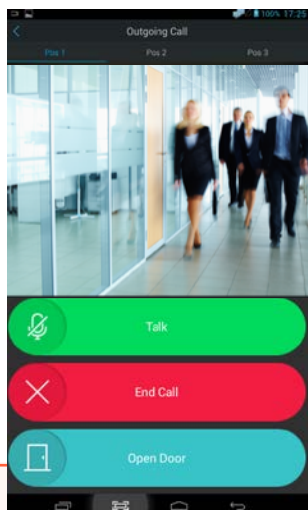
- ❖ Indoor panel for door communication
- ❖ Surface mount 25 mm flat
- ❖ Portrait or landscape mounting with automatic screen rotation
- ❖ 7" high brightness touch screen with PCAP
- ❖ Dual-Core ARM, running Android
- ❖ Proximity detection for LCD on/off
- ❖ Power saving mode
- ❖ 4W audio power
- ❖ Integrated acoustic echo cancellation for full duplex audio
- ❖ Ethernet with Power-over-Ethernet (802.3af)
- ❖ 2Wire connection (optional)
- ❖ DoorKeeper App for door communication pre-installed
- ❖ Apps from PlayStore for Home Automation, IoT, KNX, Loxone, etc.
- ❖ Interfaces:
 - Ethernet with PoE (802.3af)
 - WLAN/WIFI: option via USB for subnet bridging
 - USB 2.0
 - 2 trigger inputs
 - 1 form C relay

DOORKEEPER PC / IOS / ANDROID



DoorKeeper - Common Key Features

- ❖ SIP client for visitor communication and access control
- ❖ Automatically finds and registers with ADATIS terminals in the network
- ❖ Any number of entrances can be attended
- ❖ Supports SIP-video (H.264) and SIP-audio
- ❖ Watch-before-open-operation / SIP early media
- ❖ Up to 16 clients are supported per entrance
- ❖ Remote control of the camera (pan/tilt/zoom)
- ❖ 3 camera preset positions
- ❖ Supports external SIP server for wide area calls (WAN)



DoorKeeper - APP

- ❖ App for Android (Google PlayStore)
- ❖ App for iOS (Apple AppStore)
- ❖ Adatis hosted cloud (SIP) server
- ❖ Call history with date/time stamp

DoorKeeper - Windows

- ❖ Software for PC (Windows7 / 10)
- ❖ Local calls without a SIP server
- ❖ Runs in the background
- ❖ Minimizes automatically

FACEADMIN

FaceAdmin - Key Features

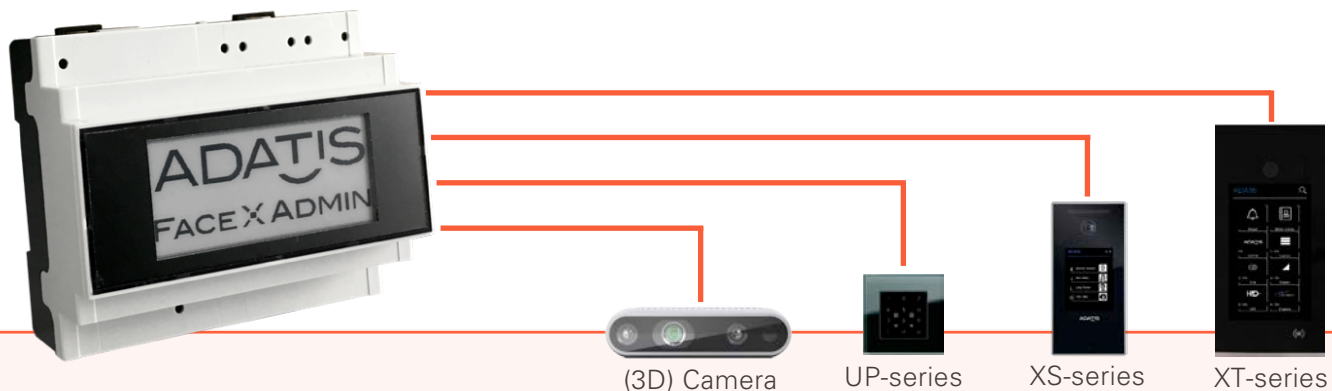
- ❖ Management server for all door Adatis terminals
- ❖ Operation via web browser, no installation required
- ❖ Same look-and-feel GUI as door stations
- ❖ Server-based online access control with terminals operating in reader mode
- ❖ Synchronizes offline access control data and intercom data with terminal databases
- ❖ Automatic switch-over between online and offline mode
- ❖ Supports Adatis group concept
- ❖ Individual mapping of groups and persons to the terminals
- ❖ Data import from terminals for migration from non-server to server mode operation
- ❖ Available as Rack- (19" 1HU) or Mini-Server
- ❖ SW-license based on number of managed terminals



FACEADMIN-AI

FaceAdmin-AI - Key Features

- ❖ Serves Adatis FaceEntry terminals and/or webcams
- ❖ Biometry with Deep Neural Network technology
- ❖ Facial model with 99.38% accuracy on the standard Labeled Faces in the Wild (LFW) benchmark
- ❖ Internal encrypted database for 10,000 faces
- ❖ Local or remote facial enrollment
- ❖ Adatis terminals or cameras connected via LAN (Gigabit Ethernet) or USB
- ❖ Interoperates with access control managements systems
- ❖ Based on NVIDIA Jetson TX2: 256 CUDA cores
- ❖ 2,9'' E-paper display for status information
- ❖ DIN-rail mounting, 7 modules wide
- ❖ PoE+ (802.3at) or 12 VDC 2A
- ❖ Local interfaces: USB 3.0, GigE, HDMI, 2x relay (C-style), 2x trigger inputs, 2x serial ports (RS232/485)



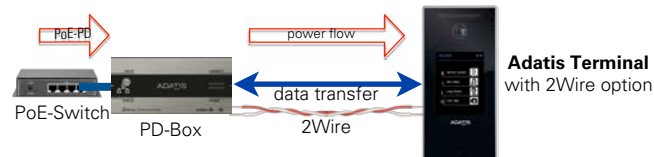
2WIRE CONVERTER



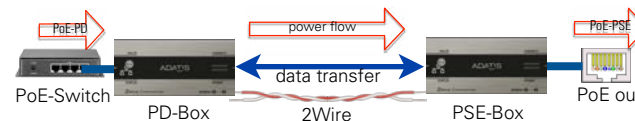
2Wire Converter - Key Features

- ❖ Ethernet via any existing wire-pair
- ❖ Transmits and receives data and power
- ❖ Two distinct unit types:
 - PD-Box: Input power = Power-over-Ethernet (PoE: 802.3af/at); up to 20W output power via 2Wire line
 - PSE-Box: Input power = 2Wire line (48-56VDC); PoE output (802.3af/at)
- ❖ Transmission over a distance of up to 500 m and with up to 500 Mbit/s
- ❖ Data is encrypted with AES-128bit
- ❖ Pairing button for automatic password generation
- ❖ Gigabit Ethernet interface: 10/100/1000
- ❖ Bus-topology: up to 16 nodes/terminals on a 2Wire bus

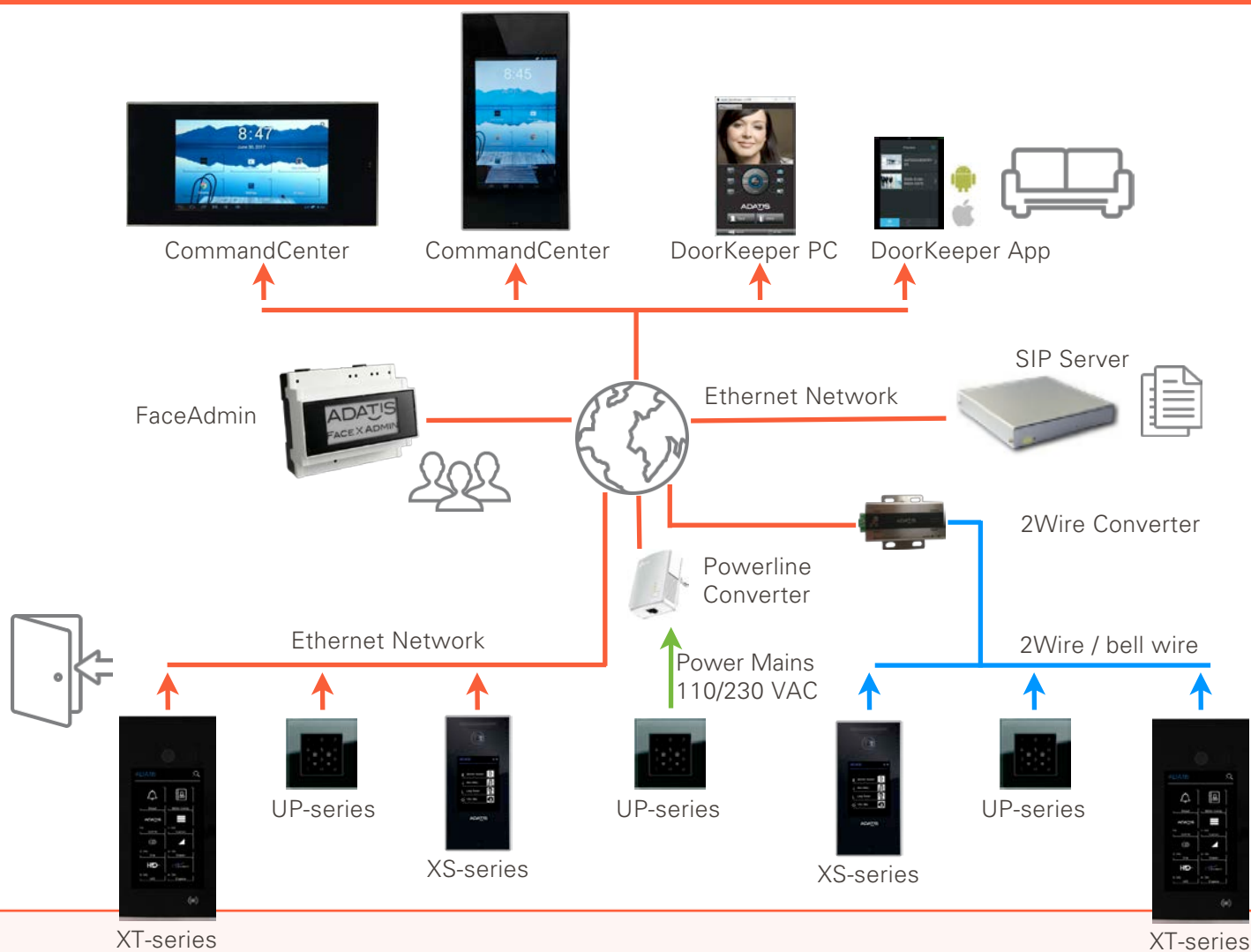
2WIRE-OPTION:



2WIRE-SET:



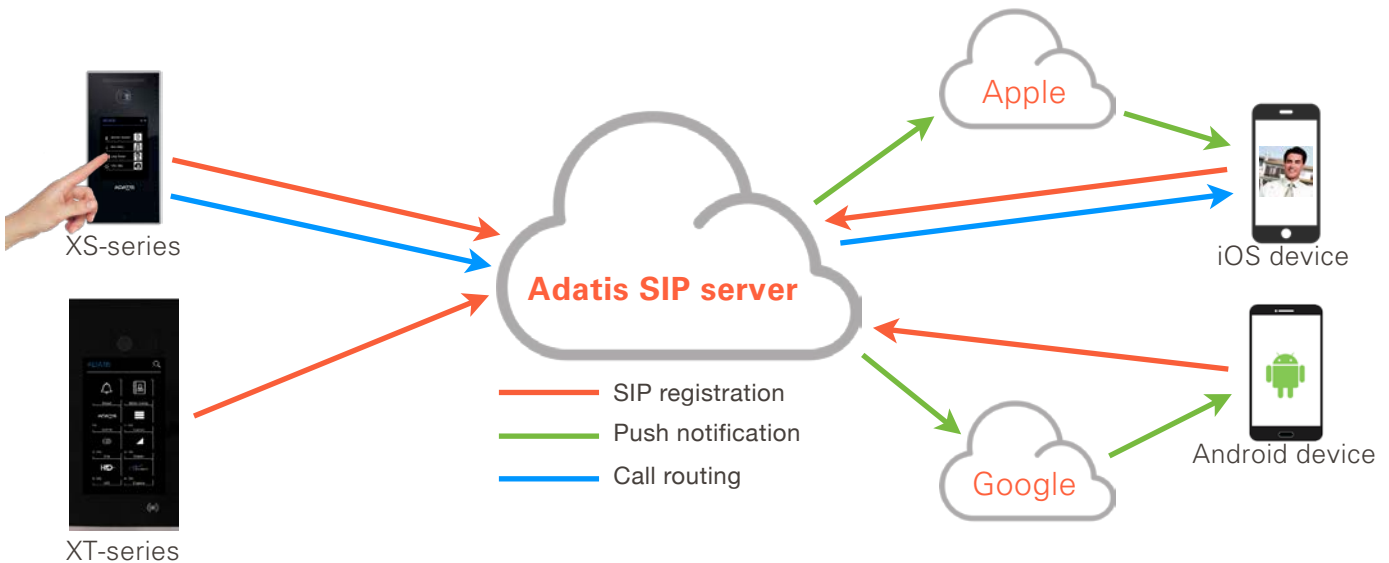
SYSTEM OVERVIEW



CLOUD SIP SERVER

Mobile Connectivity as a service

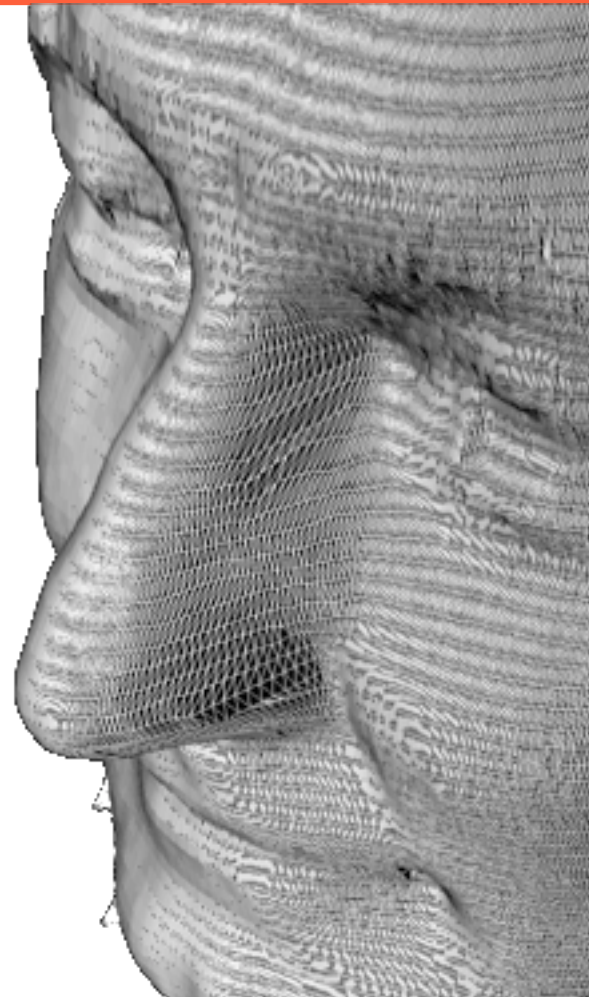
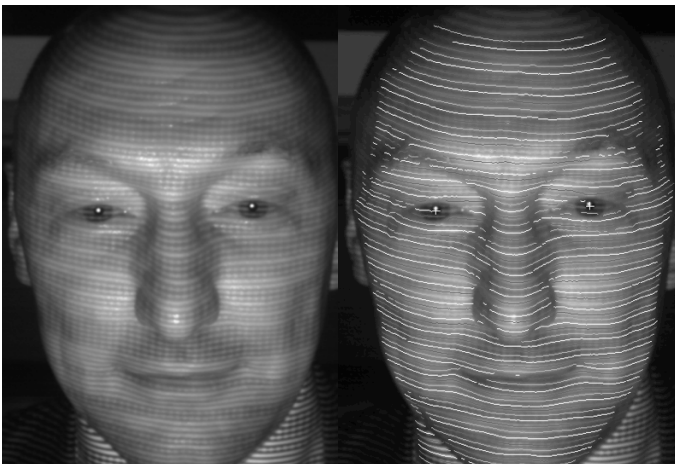
- ❖ Adatis is hosting a cloud SIP server which offers wide area connectivity as a service.
- ❖ Adatis door terminals and mobile devices register with the Adatis SIP server.
- ❖ The Adatis SIP server connects door terminals to mobile devices like smart phones and tablets running the Adatis DoorKeeper Apps.
- ❖ The Adatis SIP server uses push-notification in order to wake up or start the DoorKeeper on the mobile device.
- ❖ The Adatis SIP server is fully SIP compliant, SIP audio, SIP video (H.264), and early media.



2D/3D FACIAL RECOGNITION

Facial Recognition Technology

- ❖ All Adatis terminals offer facial recognition for access control, either embedded (FaceEntry) or server based.
- ❖ The biometry sensor uses IR illumination and works in the dark.
- ❖ Our proprietary 2.5D technology cannot be spoofed by photographs.
- ❖ Optionally a patented 3D scanning technology is available based on IR stripe projection or stereo vision.
- ❖ 2.5D or 3D is used to distinguish real life faces from pictures.
- ❖ Facial identification is based on texture analysis with model based or neural network based algorithms.



Found what you are looking for?

Then get in touch with our sales team at info@adatis.com.

They are happy to answer any questions you may have and send you a personal offer.

Need more information?

Detailed data sheets, installation manuals and other information on our products are available on our website www.adatis.com.



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We are a team of qualified and enthusiastic engineers.

Adatis considers itself as an innovator in the field of facial recognition for access control and door communication via Voice-over-IP. All products, hardware and software, are development in house.

Adatis offers the following products and solutions:



FACIAL RECOGNITION



ACCESS CONTROL



DOOR INTERCOM VOIP



SERVER

Our products

- ✓ FaceEntry
- ✓ TouchEntry
- ✓ FaceUP
- ✓ TouchUP
- ✓ FaceAdmin
- ✓ Command Center
- ✓ DoorKeeper
- ✓ 2Wire

Our solutions

- ✓ MDUs and private homes intercom & access control
- ✓ Company/campus intercom & access control
- ✓ 2D/3D Facial recognition
- ✓ Deep Learning Server and OEM products



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