Company profile

O.E. OmniBus Engineering SA

OmniBus

Engineering

Intelligent Building

OmniBus
Engineering

O.E. OmniBus Engineering develops products and services in the field of Building Automation, Supervision, and Access Control. Founded in 2001, the company may count on the profound experience
of its founders and partners, using the most innovative technologies.

OmniBus is based on four principles:

1. Technology;
2. Product quality and reliability;
3. Flexibility and customization of solutions;
4. Customer Care.

The solutions offered by OmniBus allow the:

1. Optimization of resources;
2. Cost reduction;
3. Increase in productivity;
4. Increased comfort.

OmniBus addresses:

Professional Studies of Engineering and Architecture;
Construction companies;
Real estate managing companies;
Individual clients.

Flexibility and Expertise to cover every need.

Three operational areas able to provide solutions with various levels of intervention and complexity with the objective to always guarantee the best service.

Omni**BAS**
Solution for building automation

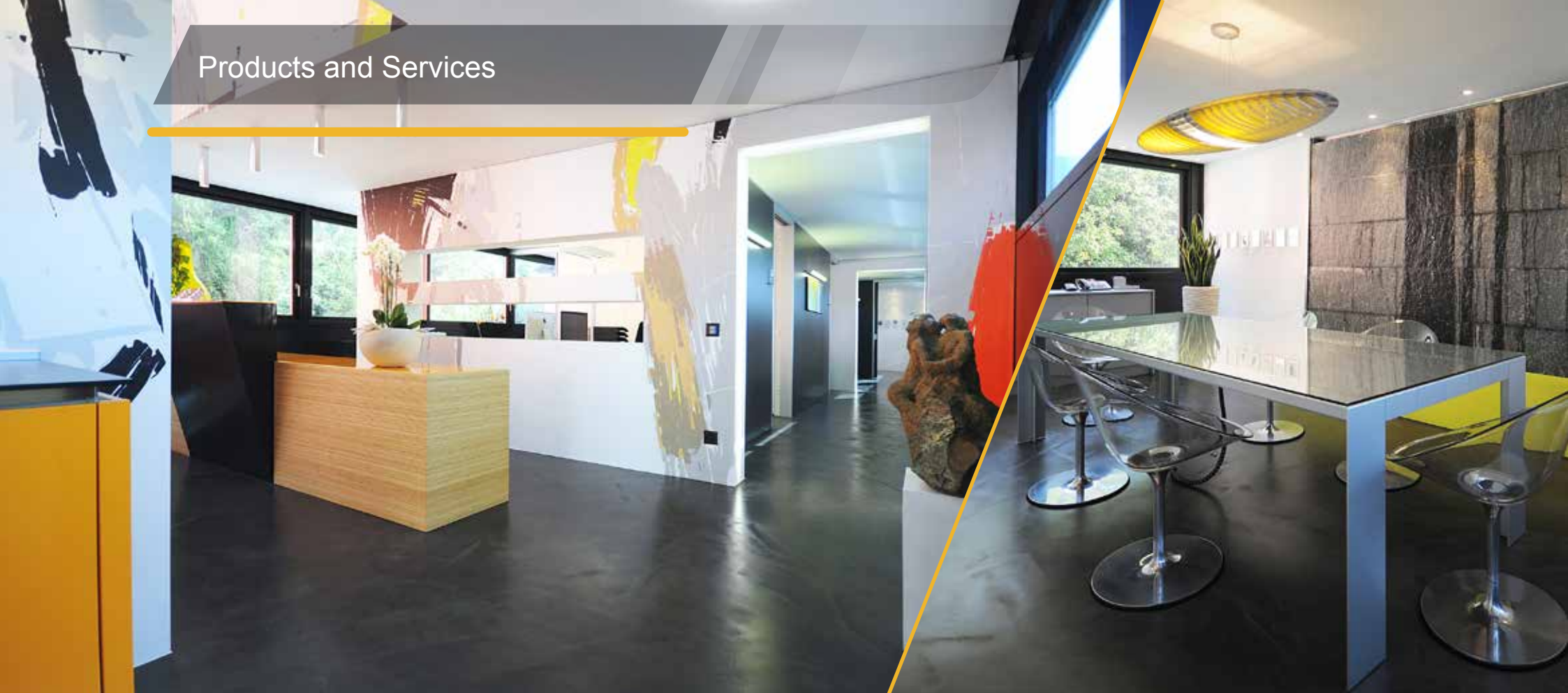Omni**Access**
The world of access control

Omni**Vision**
Visualization and supervision systems

OmniBAS

Solution for building automation

- Efficiency with distributed control
- Technology standards LonWorks®
- System efficiency and optimization
- Integration of AC and weather conditions
- Customized management of functionality

Products and Services

Control Modules

Commands

Interfaces

In summary:

1. Control of every type of lighting and shading systems;
2. Control functionality of digital and mechanical systems;
3. Interfaces for multimedia, weather stations, and peripheral devices;
4. Customizing of functionality to specific needs.

Control Modules

Digital actuators to control lights on/off.

Analog actuators for control of dimmable lights.

Actuators for motor management.

Integration with temperature control and ventilation systems.

Integration with weather stations.

Integration with presence detection systems.

Total control of software.

Plug-ins available in Italian and English.

Commands

Couplers LON for Feller keyboards EDIZIOdue both serial and mechanic.

Management of up to 16 keys, 16 LEDs and buzzer with a single coupler.

LON couplers for any type of mechanical key.

Customizing luminosity and color of each key.

Each key is programmable for multiple commands depending on pressure,
release or duration of pressure.

Interfaces

OmniLMG. Gateway LON/LAN with support for up to 1200 points and internal time schedule for the execution of commands.

OmniDMX. Gateway LON/DMX512 for control of multi-color LEDs.

OmniDALI. Gateway LON/DALI light management using the DALI protocol.

Multimedia. Integration of home automation systems with Bang & Olufsen, Sonos and Tutondo.

Special gateways. Possibility to develop interfaces for proprietary protocols.
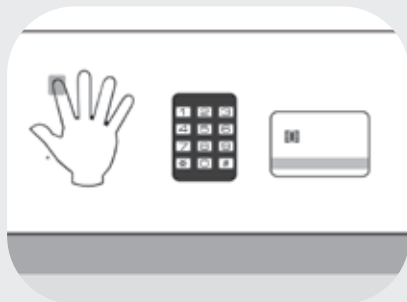
OmniAccess
The world of access control

- Unique complete HW/SW Platform
- Integration with management and supervision software
- Modularity and system modeling
- Solutions stand-alone and multi-user
- Integration with fire and burglary systems

Products and Services

Access Systems

Software

Hardware

In summary:

1. Management of multiple access methods.
2. User friendly software interface.
3. Standard SQL Database.
4. Proprietary hardware on the LON bus operates independently from the availability of the software and the LAN.

Access Systems

Safe and precise identification using proximity badges, biometric readers
based on the geometry of fingers, as well as multifunction fingerprint readers, keypad and badge.
Support of Wiegand and other protocols for transmission and authentication.
Channel partner products HID Global iClass SE.
Development of interfaces for proprietary protocols.

Software

A single interface modeled in line with the operator profile for the complete management of the system, i.e. from the definition of the database containing user registration data and the rules
for access control to the management of gates and readers.
Windows environment and customizable, easy to use Office-like interface.
No limit to the number of operators, badges and gates.
Optional modules for every need.
Ability to export data to presence and human resource management (HR) systems.

Hardware

Proprietary hardware using secure encryption protocols.
LAN interface for distributed systems over the LAN/WAN.
LON interface for integration with home automation systems.
System operating independently from software and network availability.
Locally stored history of transits and events.
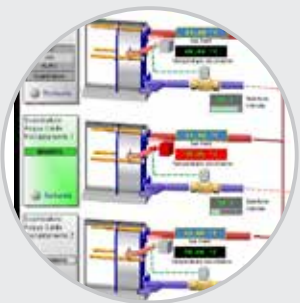Direct management of external events, such as alarms from the central fire or burglary systems.

OmniVISION
Visualization and supervision systems

- Control of industrial installations
- Interfaces web-touch smartphone
- Data analysis, statistics, performance
- Management of home automation systems
- Simultaneous integration
of different busses

OmniVision SCADA

OmniVision NAV

In summary:

1. Two independent solutions for the industry (SCADA) and residential homes (NAV);
2. Integration of multiple protocols and devices;
3. Complete customization of solutions;
4. Data analysis and integration with third parties.

OmniVision SCADA
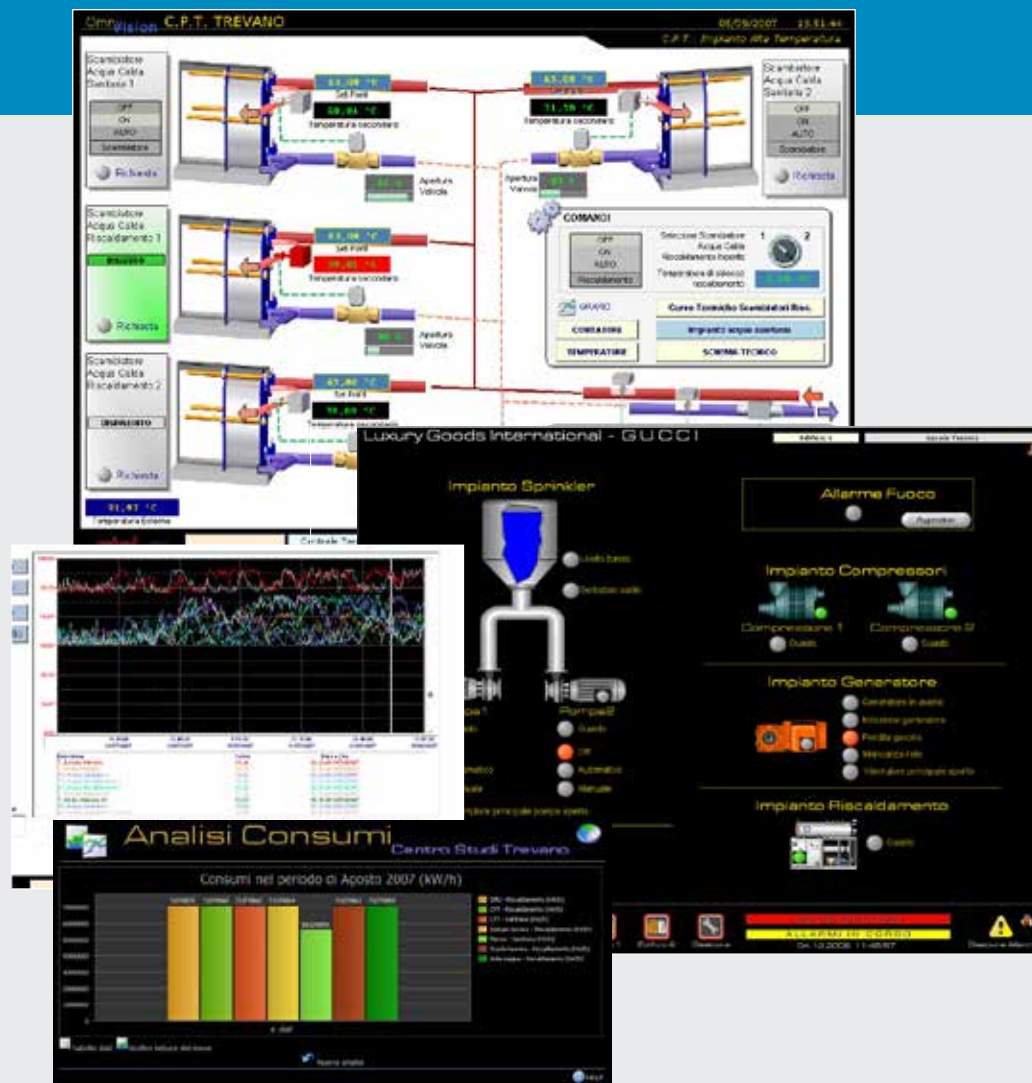## Solutions for the industry

Solution based on SCADA Engine FDA certificate CRF21-11 for industrial environments built upon the Movicon Progea platform.

OmniBus performs all phases of development, from analysis to design and implementation of symbolic representation.
The following steps are installation, system test and operator training.

OmniBus may develop OPC Client or Server communication drivers to integrate proprietary communication protocols into OmniVision SCADA.

OmniBus may also perform specific processing of the data acquired by the SCADA system.

OmniVision NAV
Solutions for residential applications

The system takes advantage of the latest web technologies and provides an interface designed for touch systems.

Infinite scenarios for your own home controllable with a single command, either via touch panel or smartphone (locally or remotely) using Apple or Android.

Automatic execution of scenarios using calendars.

Display of weather information, alarms, and cameras. Integration with multimedia systems.

Projects

Hugo Boss

Professional Center, Trevano

NGS Net Global System Nigeria

Mantegazza Building

Lugano Airport, Agno

Banca Popolare di Sondrio

The project applies the Minergie rules
for the management of illumination and AC
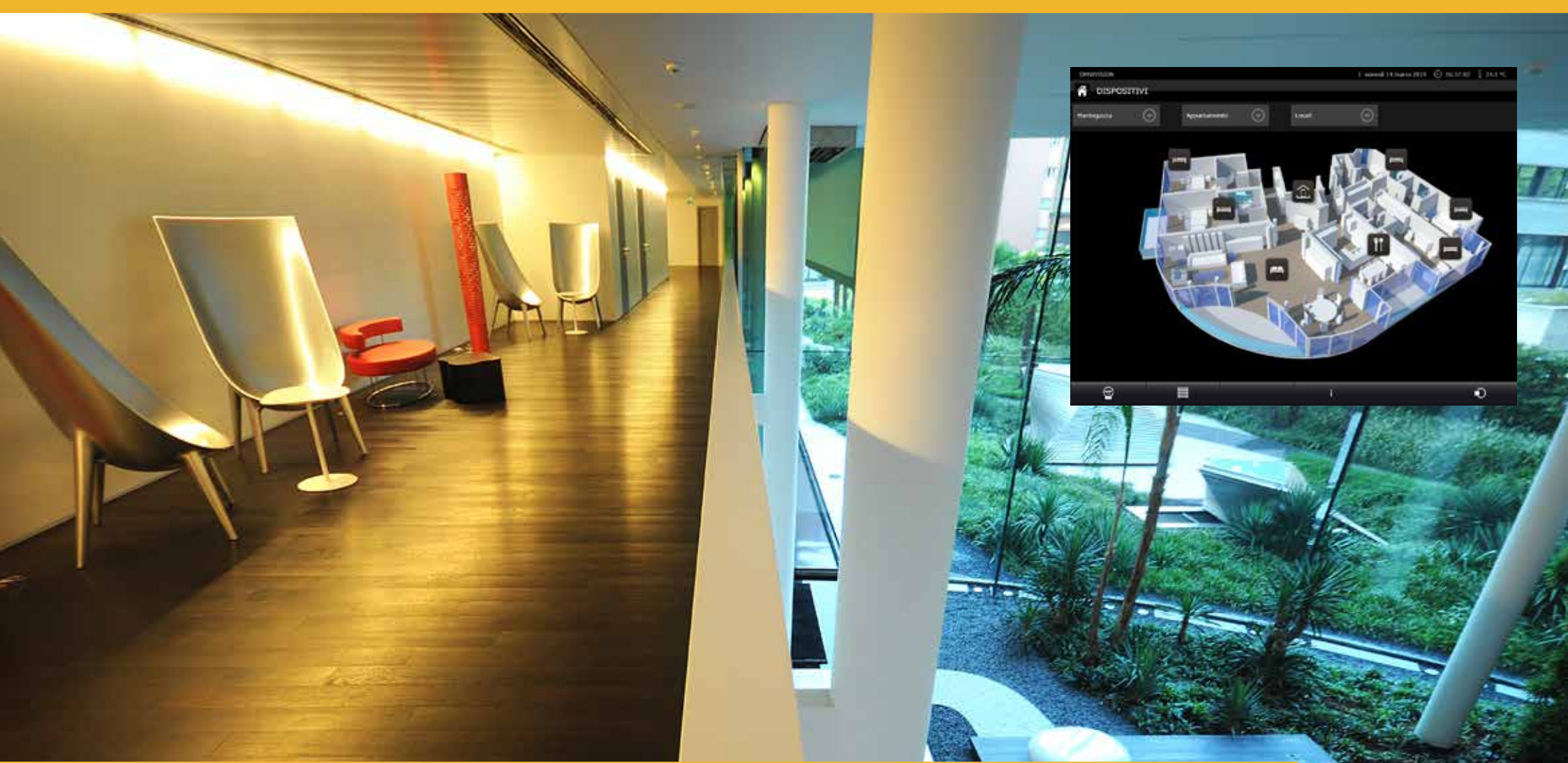according to external environmental conditions.

Hugo Boss SA, Coldrerio

- 495 modules LON OmniBus
- 260 digital inputs
- 180 technical alarms
- Integration with Berker keys using LPT communication (2-wire)
- 6 signals from weather station

- 6 redundant supervision positions using OmniBus touch-panel
- 1 centralized position for Honeywell supervision interfaced with touch panel OmniBus
- Management of fan coils using Honeywell LON modules integrated with OmniBus database

Complete management of illumination, blinds, and AC both in public areas and apartments. Separate supervision for each apartment.
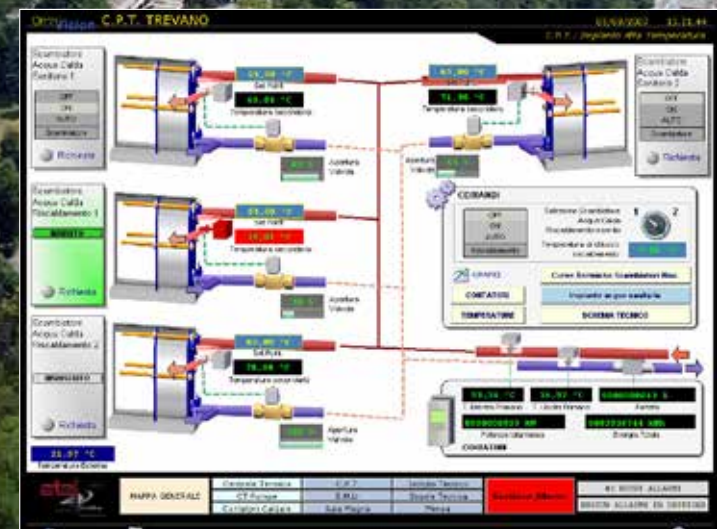
Mantegazza Building, Paradiso

- 40 apartments
- Commercial areas, event spaces, business center, ...
- 2380 LON modules (I/O modules, routers, BCU, sensors, ..)
- Integration of DALI and DMX512 lighting management for apartments and commercial areas

- Integrated motor controls Warema (Building facades)
- Integration with Siemens AC systems
- Management alarms and weather information

Professional Center, Trevano

The seven thermal power plants for the entire school
are supervised remotely via web.
Over 500,000 data are processed daily
to provide the basis for the analysis of consumption,
performance, and leakage of power plants.

- 7 power stations
- 400 measurement points
- 70 types of alarm
- 576000 data processed daily
- Remote management and web alert by email
- Historical data analysis
- Management of consumption, yields, losses
- Optical fiber backbone BACNet
- Integration Honeywell web plc

Lugano Airport, Agno

Control of all runway lights and management of all airport systems is entrusted to a redundant infrastructure implemented using OmniVision SCADA.

- Total control of runway lighting
- Management of technological airport systems
- 2 independent redundant workstations for the control tower
- 2 redundant servers for the management of the installation and data analysis
- Interface with redundant SPS Modbus Schneider Electric
- Interface with PLC Siemens Profibus
- Redundant Fiber Optic Backbone
- Certification system FOCA - SkyGuide

OmniACCESS manages all accesses to the entire oil complex with more than 12,000 employees across the country. Users are identified via HID proximity badges and Dibis Lon for biometrics.

- 14 locations
- 12000 users
- 20000 badges
- 260 gates
- 15 router LAN/WAN
- Over 37000 daily transits

Banca Popolare di Sondrio

The main office and 24 branch offices throughout Switzerland are connected via a single access control system.
In addition, the management of lighting and blinds is implemented using OmniBAS.

- *24 locations*
- *21 external companies*
- *750 users*
- *154 profiles*
- *1700 badges*
- *134 gates*
- *210 biometric readers*
- *1850 daily transits*
- *Over 3 million recorded transits*

References

BANKS AND SECURITY

- Banca Popolare di Sondrio (SUISSE) SA [A] (Headquarters + 25 branches in CH)
- Banca Popolare di Sondrio Monaco [A]
- Bank Edmond de Rothschild SA Swiss [A] [B] [V]
- EFG SA ex BSI SA (formerly Banca Del Gottardo) [A]
- PKB Privatbank AG [B] [V]
- Fidinam SA [B]
- Bank Julius Baer & Co. Ltd. [B]
- UBS SA [B]
- Bank Zarattini & CO SA, Lugano [B] (formerly Banca Euromobiliare Suisse SA)
- Leumi Private Bank, Lugano [B]
- Valcambi SA [B]
- SGSS - Société Générale Securities Services, Milan [A] [V]
- Banca Popolare di Bergamo, Bergamo [B]
- Bollate Penitentiary, Milan [B]
- Art Defender S.p.A., Florence [A] [B] [V]
- Art Defender S.p.A., Bologna [A] [B] [V]
- J. Safrà Bank Sarasin AG, Zürich [B] [V]
- Raiffeisen Bank Vedeggio, Gravesano [B] [V]
- HSBC, Lugano [B]
- Raiffeisen Bank, Biasca [B] [V]
- Edmond de Rothschild Bank, Lugano [A] [B] [V]
- Credinvest, Lugano [A]
- Cornèr Bank, Lugano [A]

SERVICES AND TRADE

- Lugano Airport SA [V]
- Migros Ticino [B]
- Casino Locarno SA [B] [V]
- Professional Center Trevano [V]
- Geneva Palexpo [B]
- Medical Center Artaria Lugano [B] [V]
- Hospital Oderzo [B]
- ASL Roma [B]
- Amag Zürich AG - Porsche Centre Ticino [B] [V]
- Mercedes Benz, Pambio Noranco [B] [V]
- Hugo Boss Ticino SA [B] [V]
- AET, Montecarasso [B]
- Tecnoprogetti SA [A] [B] [V]
- Elettroconsulenze Solcà SA [B] [V]
- Mondini SA Elettrigilà [B] [V]
- Center Polaris, Chiasso [B] [V]
- Assos of Switzerland, Lugano [B] [V]
- New radiology department EOC (Civic Hospital Lugano) [B]
- GPM Global Property Management SA (Fidinam), Lugano [B]
- ITGO Data Center, Lugano [A]
- IAS Institute of Social Insurance, Bellinzona [B]
- Evangelical Center, Magliaso [B]
- Nursery, Melano [A]
- Merloni Ariston International SA, Manno [A]
- Fossil museum, Meride [B]
- LAC - New Cultural Center Lugano [A]
- Hotel Casa Berno, Phase 1, Ascona [B] [V]

[A]: OmniACCESS   [B]: OmniBAS   [V]: OmniVISION

References

RESIDENTIAL

- Mantegazza Building, Lugano [B]
- Residence Vecchio Torchio, Lugano [B] [V]
- Mirabilis Residence Collina d'Oro, Lugano [B] [V]
- Residence Conca d'Oro, Lugano-Paradiso [B] [V]
- Residence Le Palme, Lugano [B] [V]
- Eden Résidence des Neiges, Crans-Montana [V]
- Penthouse Casa Luce, Locarno [B]
- Penthouse Residence Clio, Giubiasco [B] [V]
- Penthouse Residence Brima, Ascona [B] [V]
- Penthouse Elena, Arcegno [B]
- Villa Müller, Melide [B]
- Villa Thomas Botta, Mendrisio [B] [V]
- Villa Mitolo, Melano [B] [V]
- Villa Kurbatov, Carona [B] [V]
- Villa Badaracco, Montagnola [B] [V]
- Villa Gilà, Tegna [B] [V]
- Villa Brontallina, Ascona [B] [V]

PUBLIC

- Pedestrian zone management, City of Locarno [A]
- SUPSI, Manno [A]
- Sala del Gran Consiglio, Bellinzona [B]
- New refectory Isone barracks, Isone [B]

INDUSTRY

- Consitex Ermenegildo Zegna, Mendrisio [B] [V]
- International Luxury Goods (Gucci) SA [B] [V]
- Rolex, Genève [B]
- NGS Nigeria [A]
- GIMAR Tecno Srl [V]
- ENEL Italy [A]
- Indesit Company International Business SA [A]
- Italcementi SpA, Bergamo [A]
- Siemens, Steinhausen [B]
- Honeywell, Volketswill [B]
- Tamoil Italy [A]
- Tiscali Italy [A]
- Alcatel Italy [A]
- Bayer Italy [A]

ONGOING PROJECTS

- Residential Complex Archi di Luce, Castagnola [B] [V]
- Renovation Civic Hospital, Lugano [B]
- Residence EOS2, Ascona [B] [V]
- Villa Stiffler, S. Ronco Ascona [B]
- Residence Cedrus, Brione S. Minusio [B]
- Onda Viva, Ronco sopra Ascona [B] [V]
- Theater of Architecture, Mendrisio [B] [V]
- Elderly House, Giornico [B] [A]
- Hotel Casa Berno, Phase 2, Ascona [B] [V]
- Bank Cler, Agency of Locarno [B]
- Residence Felicità, Montagnola [B] [V]
- Villa Vicky Mantegazza [B] [V]
- Bank Edmond de Rothschild Suisse SA - Building Solba [A] [B] [V]

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OmniBus

Engineering

Intelligent Building