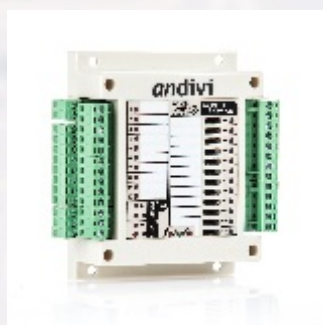


PRODUCT CATALOGUE 2016



Andivi I/O Units



Andivi Thermostat



Andivi Temperature Sensors



Andivi Humidity Sensors



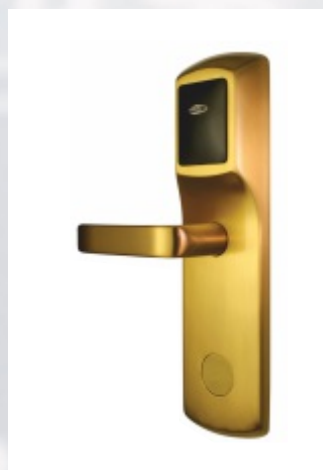
Andivi Pressure Sensors



Andivi Automation Station



Andivi Controller



Andivi Hotel Door Lock



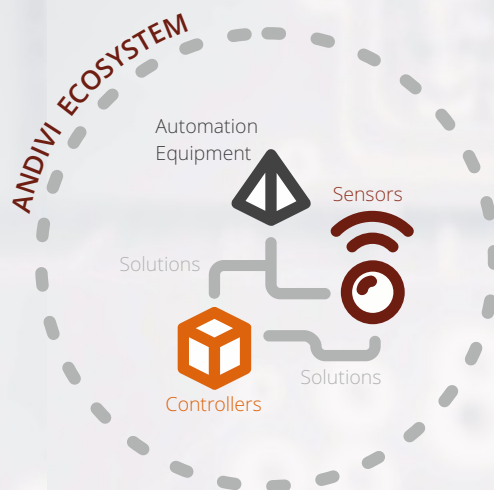
Energy Saving Switch



Andivi Thermostat



Andivi Door Lock



We value Simplicity & Flexibility.
We are Andivi.

andivi

Andivi Building Automation Solutions

Andivi d.o.o.

Zagrebska cesta 102

2000 Maribor

Slovenia

www.andivi.com

info@andivi.com

tel: +386 2 450 31 00

fax: +386 2 450 31 99

Andivi Catalogue 2016

Dear Customers and Partners

At Andivi we believe **every building is an opportunity to save energy with intelligent building automation.**

We understand building automation as the building's central brain. Like the brain in a human's body is responsible for coordinating, controlling & monitoring the entire body, a building's automation system is responsible for managing all the building's functions. From HVAC to lighting, from efficient energy saving to responsible energy management. From midnight, to midnight, to midnight. Every day. 365 days a year.

Andivi was established in 2011 by a group of mechanical and electrical engineers. In the last 5 years Andivi has grown from producing only thermostats & room controllers to a company with a significant larger portfolio of building automation products. The new product palettes include extremely powerful controllers / automation stations, multi-functional I/O units and a variety of different sensors. We now have a product and solutions range, that is capable to fully cover entire building automation needs. This is why in 2016 we are introducing:

- ▶ **360° Building Automation System,**
- ▶ **360° Measurement, Control and Regulation,**
- ▶ **360° Building Management System.**

Focusing on the non-residential sector, we are continuing to cover automation needs for: hotels, corporate & office buildings, condominiums, public buildings, industries, healthcare facilities, wellness facilities.

Furthermore, we are able to adjust our automation solutions and tailor them to project specific demands - according to our customer's needs. So do not hesitate to contact us if you have a challenging idea in mind.

We work with integrators and investors / end-clients. **For integrators:** we provide you with all the support, needed to integrate Andivi products into your client's projects. This way you will be able to complete full automation setups completely independently.

For investors we provide an all-in-one solution. This starts with sustainable consulting in the concept phase of your building and continues with automation engineering, planning and final execution. Including providing the necessary automation equipment to finish installation and setting up the entire system.

At Andivi, we are privileged to welcome ambitious clients with daring projects and a passion for energy efficient automation. **Welcome to our Future!**



Danijel Muršič, Andivi CEO

Work with us

Why Andivi?



PERFORMANCE

All Andivi products have been engineered to superiorly perform at every level.



HIGH QUALITY

Our products have been carefully thought through and created to last.



CUSTOMISATION

Our trusted engineers will help you with customization requests for your special projects.



TECHNICAL SUPPORT

A greater value for end-clients and system integrators due to fast & professional technical support.



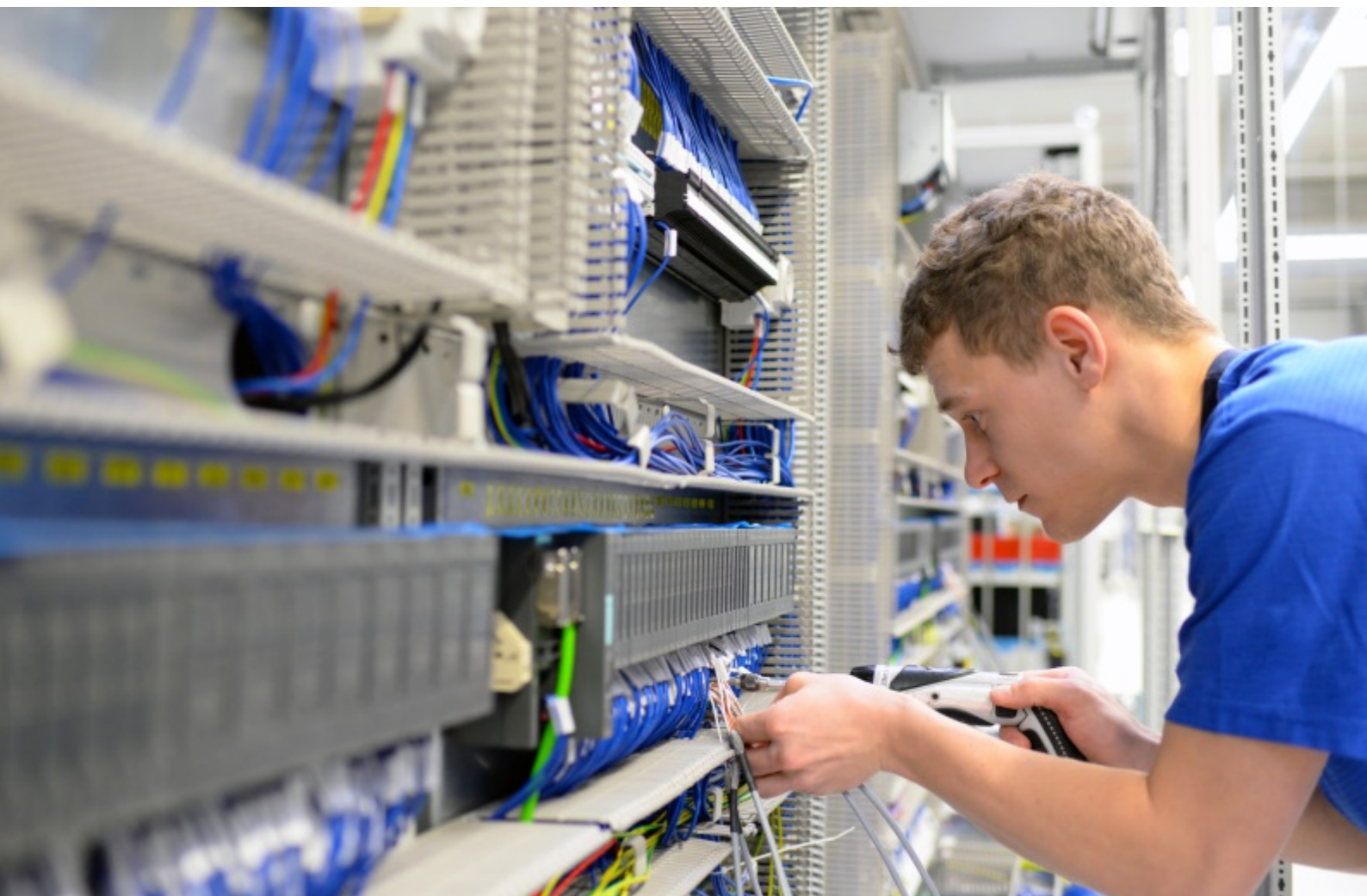
INTELLIGENCE

Building Intelligence on deep and dynamic, yet user-friendly level: The Way Your Building Wants It.



SOLUTIONS

See how our technology is being integrated into products and interactive experiences.



Catalogue 2016

Index

INTRODUCTION

INTRODUCTION

WHY ANDIVI	4
INDEX	5
PRODUCT HIGHLIGHTS 2016	6
HOLISTIC APPROACH TO BUILDING AUTOMATION	8
HOW WE HELP END-CLIENTS	10
HOW WE HELP INTEGRATORS	11
PARTNERS	12
SUPPORT	13
REFERENCES	14
CLIENT TESTIMONIALS	15

CONTROLLERS / AUTOMATION STATIONS 15

U-DDC	17
U-MIO	21

THERMOSTATS 23

TRB	25
TRC	28

ELECTRONIC HOTEL DOOR LOCKS 31

DOOR LOCK - BASIC	34
DOOR LOCK - HIGH	35
DOOR LOCK - SLIM	36

INTELLIGENT HOTEL ROOM EQUIPMENT 37

EXTERNAL CARD READER	41
ACCESS CONTROL POWER SUPPLY	42
ELECTRIC STRIKE	43
ENERGY SAVING SWITCH	44
CARD ENCODER	45
HOTEL GUEST CARD	46

SENSORS 47

TEMPERATURE SENSORS	49
HUMIDITY SENSORS	59
CO ₂ & AIR QUALITY SENSORS	62
MOTION & LIGHT SENSORS	67
PRESSURE SENSORS	69
FLOW SENSORS	75
ALL SENSORS - SENSOR LIST	77

HOTEL ROOM SOLUTIONS 79

VIA SMART HOME 87

VIA BUILDING & ENERGY MANAGEMENT SYSTEM 95

PRODUCTS

SOLUTIONS

Key Products Highlights 2016

New controller

Freely programmable ANDIVI U-DDC CONTROLLER

Multifunctional and freely programmable Andivi U-DDC controller with many advantages.

Key Features:

- Supports: **Modbus** and **KNX** protocol simultaneously,
- 5 digital inputs, 2 digital outputs,
- Integrated **Web Server**,
- Clock function, local bus connection,
- State of the art programming,
- Schedules, alerts, alarms,
- support for **MySQL** and **MS SQL** databases ...

More information on page: 15.



New thermostat

Smart Digital Room Controller ANDIVI TRB THERMOSTAT

Andivi TRB thermostat for heating and cooling distinguished by elegant design and ease of use.

Key Features:

- 2-pipe, 4-pipe,
- Communication: **Modbus**, RS485, **WiFi**,
- **Clock**, memory, weekly programming,
- **Keycard** connection
- ...

More information on page: 23.



Key Products

Highlights 2016

New door locks

Electronic Hotel Door Lock

ANDIVI ELECTRONIC DOOR LOCK

Standalone electronic door lock, suitable for hotels, apartment or office buildings.

Key Features:

- Material: **Metal shell**, easy maintenance silver or gold surface finish,
- Integrated **RFID reader** for Mifare cards,
- Standalone system (powered by 4 × AA),
- Low power alarm,
- **Anti panic** function,
- **Anti burglar** bolt,
- ANSI mortise (Euro optional in some models),
- Durable: **shock durable more than 1000 kg**,

More information on page: 31.

Integrated
RFID reader!



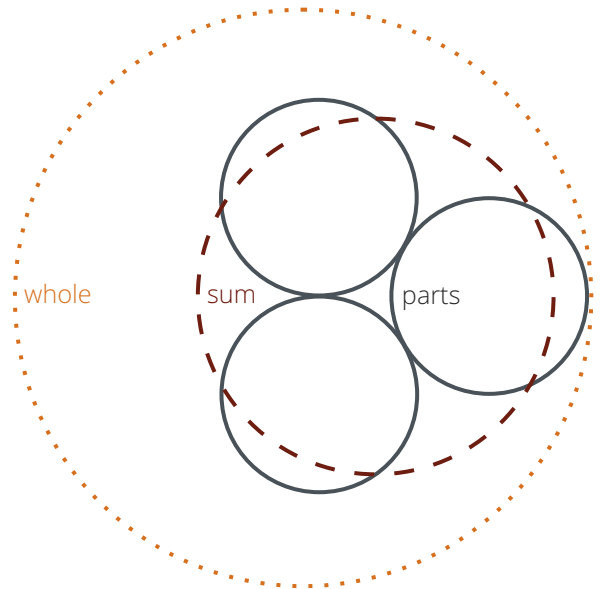
The Sum is greater than the Value of the Parts

Holistic Approach to Building Automation

The concept for the creating building automation solutions must be holistic.

The concepts, products and performances are linked to one another so that the entire process becomes a closed loop, more valuable as a complete system than each of the components would be apart.

The synergetic performance of the building coupled with unique and energy efficient automation solutions will likewise become an attractive tool for increasing market interest in a building.



End-clients

How we help end-clients

CONCEPT

DEFINING THE PROJECT:

- ▶ Defining the client's requests.
- ▶ Defining the client's needs.
- ▶ Defining the users's needs.
- ▶ Preparation of a draft project proposal.
- ▶ Proposal optimisation.
- ▶ Preparation of a final project proposal.

PROJECT EXECUTION

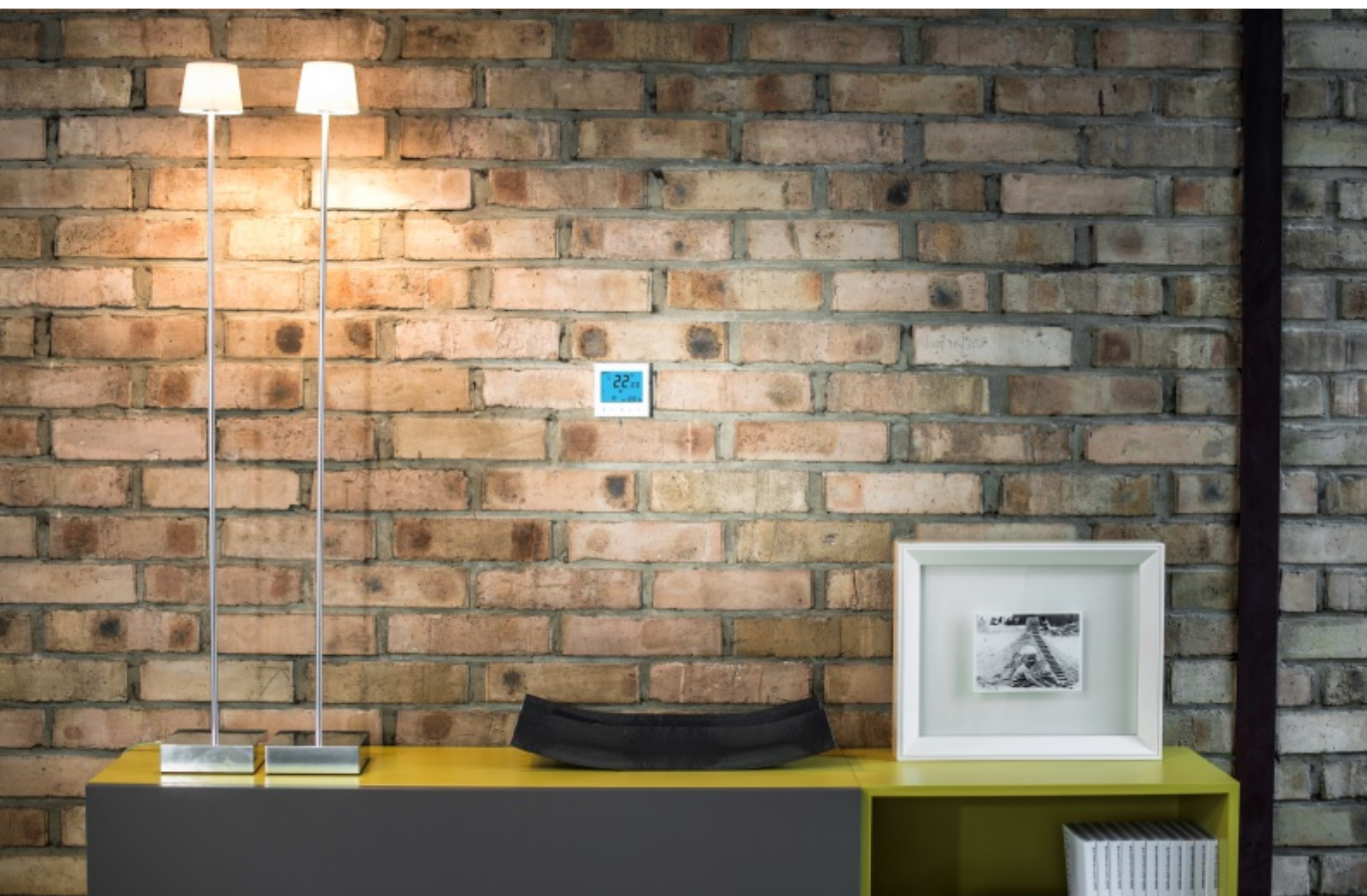
IMPLEMENTATION:

- ▶ Providing the necessary hardware for holistic project execution.
- ▶ Standard system software programming.
- ▶ Custom system software programming.
- ▶ System integrator support.

SERVICES

SUPPORT & SERVICES:

- ▶ Remote system monitoring.
- ▶ System optimisation.
- ▶ Setting up notifications.



Integrators

How we help integrators

INTEGRATORS

We are always looking for trustworthy integrators to become our partners. If you are interested in Andivi automation products, get in touch and we will show you the tremendous product potential that you will be able to bring to your clients.

WORKSHOPS

In order integrators can guarantee a flawless installation for their clients, we organize educational workshops where everyone can learn how to properly use, setup and program Andivi equipment. The workshops will enable you to become a certified Andivi integrator.

HOTLINE

For Certified Andivi Integrators we are only one phone call or one e-mail away. Our customer care team will support you whether in office or on site, to make sure your projects run according to your schedule and deadlines.

+386 2 450 31 00 | info@andivi.com



Distributors & Dealers Partners

PARTNERS

We value partnerships that create value for everyone.

Therefore, we are always open for cooperation with ambitious partners.

If you are interested in distributing Andivi automation products or becoming a certified dealer, get in touch at:

+386 2 450 31 00 | info@andivi.com



Hotel Apollo ****, Portorose

Customer Care Support

OUR TEAM OF EXPERTS WILL FOCUS ON YOUR SOLUTION

Our team of professional engineers will help you create a solution that will solve the challenges presented.

With background in automation and in HVAC, we are able to create the optimal solution for your hotel, office building or condominium tower.

We know that the first idea is just a starting point. For us our cooperation is a process. We want to:

- ▶ Understand your building's needs.
- ▶ Explore for best options.
- ▶ Verify the solution by simulating and analyzing it.
- ▶ Iterate the process and refine the specifications.
- ▶ Implement the final solution.
- ▶ Monitor the performance.

HERE FOR YOU

We value support as high as our products. We are the company that will live with your solution instead of merely implementing it. If you have a specific question that you need to answer, please – e-mail us at:

support@andivi.com

and one of our trusted engineers will be in touch with you very shortly.



D Resort Šibenik - Villas, Šibenik, Croatia



Student Housing, Varaždin, Croatia

References - Executed Projects

References



- ▶ UNITED NATIONS ECO BUILDING
Podgorica, Montenegro
- ▶ SI.MOBIL MOBILE OPERATOR HQ
Ljubljana, Slovenia
- ▶ AIRPORT JOZE PUCNIK, HANGAR #2
Ljubljana, Slovenia
- ▶ GRAND HOTEL PORTOROSE
Portorose, Slovenia
- ▶ HOTEL APOLLO
Portorose, Slovenia
- ▶ DEM - DRAVA POWER PLANTS MB
Maribor, Slovenia
- ▶ WELLNESS GALERIA
Subotica, Serbia
- ▶ TERME PALACE
Portorose, Slovenia
- ▶ CULTURAL CENTRE ANIN DVOR
Rogaska Slatina, Slovenia
- ▶ CITY HALL
Jesenice, Slovenia
- ▶ ELEKTRO MARIBOR HQ
Maribor, Slovenia
- ▶ NEFRODIAL CLINIC
Ljubljana, Slovenia
- ▶ S TILIA INSURANCE
Novo mesto, Slovenia
- ▶ STUDENT HOUSING VARAZDIN
Varazdin, Croatia
- ▶ D-RESORT SIBENIK - VILLAS
Sibenik, Croatia
- ▶ OFFICE KOVINARSTVO BUCAR
Miklavz, Slovenia
- ▶ MENERGA SLOVENIA HQ
Maribor, Slovenia
- ▶ PRIVATE VILLAS
International
- ▶ PRIVATE SWIMMING POOLS
International

References - Client testimonials

Why our Clients trust Andivi

„MANAGING OUR THERMOSTATS FROM ONE LOCATION“

„We implemented the room thermostat Andivi in our system, as we transitioned from merely heating, to heating and cooling our offices. Since then working conditions have significantly improved, at the same time the thermostats enabled us to adjust the room temperature in all periods of the year.

For us it is important to manage our thermostats from one location and use their automatic operation functionality. Most importantly, it allows the system as a whole to work and we manage to keep the level of costs at the same level as before the upgrade of the heating systems to cooling as well.“

Miran Đuran,
Elektro Maribor



„AN IMPORTANT WAY OF PROVIDING COMFORT“

„Room thermostats „Andivi“ represent an important way of providing comfort to our dialysis patients. The room thermostats enable ideal treatment conditions in every single room.

We are pleased by the fact we are saving energy and reducing costs, while showing our relationship to environment conservation at the same time.“

Borut Bornšek,
Fresenius Medical Care Slovenia



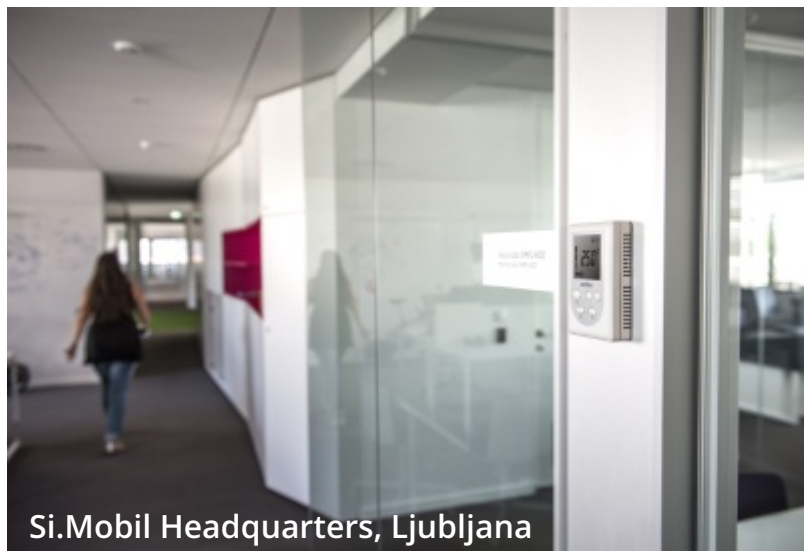
„WE MONITOR CONSUMPTION TRENDS“

„At Si.mobil all our socially-responsible activities combine under the auspices of Re.misli (Re.think) philosophy. In our social-responsible strategy we pay special attention to the following fields: sustainable network, social development, responsible business through responsible products and services and environmental footprint, to which energy efficiency undoubtedly makes an important contribution.

We are pleased we have a spatial control that is easy to use, but is also effective, as it allows us to set various parameters remotely. In addition, we can also follow the trends in consumption and if necessary, correct parameters accordingly.

VIA is a powerful addition to the spatial regulation, as it allows us access over the mobile network and thereby a direct review of the situation and possible corrections of parameters.“

Boštjan Škufca Zaveršek,
Si.mobil



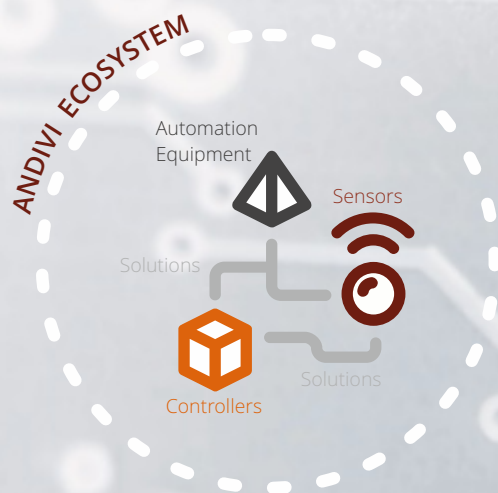
Si.Mobil Headquarters, Ljubljana

Controllers / Automation Stations

Products	▶ Controllers / Automation Stations	13
	I/O Units	17
	Thermostats	21
	Electronic Hotel Door Locks	29
	Intelligent Hotel Room Equipment	37
	Sensors	45
Solutions	Hotel Room Solutions	77
	VIA Smart Home	85
	VIA Building & Energy Management	93

BUILDING
INTELLIGENCE
THE WAY YOUR
BUILDING
WANTS
IT.

andivi



Controllers / Automation Stations

U-DDC

Andivi U-DDC KNX 1.0 is a freely programmable Automation Station / DDC controller supporting KNX and Modbus. It can be used to control residential and non-residential buildings, together with integration of Andivi third-party devices.

TYPE

Andivi U-DDC 1.0
(supports only Modbus)

Andivi U-DDC KNX 1.0
(supports Modbus & KNX)

HIGHLIGHTS

- ▶ Schedulers
- ▶ Alarm management
- ▶ Remote management with VIA BMS
- ▶ Concurrent use of KNX or/and Modbus devices on the same U-DDC controller
- ▶ Integration of various third-party devices
- ▶ Stand alone application or use in a device or system network
- ▶ Optional features: MySQL and MS SQL database support



TECHNICAL DATA

- ▶ Digital inputs: 5 (optically isolated)
- ▶ Digital outputs: 2 (relay 230VAC 2A)
- ▶ KNX adapter for communication with KNX systems; max. 253 KNX group objects; U-DDC KNX Version only.
- ▶ BUS serial connection for temperature sensors with 3-wire BUS. 2x BUS, 10 temperature sensors/BUS, total 20 temperature sensors. Intelligent addressing system.
- ▶ Modbus TCP/IP protocol master/slave for communication with SCADA building management systems.
- ▶ Modbus RTU RS-485 protocol master/slave for communication with external modules. 4x BUS; max. 128 Modbus slave devices.
- ▶ Integrated Web server with visual and textual form, freely adaptable to project, user profiles, language select, HTTPS support.
- ▶ Local BUS connection with I/O modules connected on a DIN rail system.
- ▶ Ethernet adapter RJ-45 (10/100 MBit/s): for communication and programming.
- ▶ USB adapter 4x / RS-485, RS232 for communication with external I/O modules.
- ▶ Visual and textual programming IEC61131-3 with simulation and emulation. Custom function blocks support. CFC, ST, FDB, LD, IL, SFC support. Online error check.
- ▶ Connection with SQL data base systems. MS SQL and MySQL support.
- ▶ CPU: ARM Cortex-A7, Quad-core, 900 MHz
- ▶ Data Storage: SDRAM 1 GB
- ▶ Operation System: LINUX
- ▶ Integrated real time clock with automatic synchronization with NTP protocol.
- ▶ Hardware watchdog.
- ▶ Micro SD card for application program and data storage.
- ▶ Power Supply: 15-24VAC/DC, max 5W
- ▶ Mounting: DIN-compliant design (DIN rail)
- ▶ Dimensions: 101 × 80 × 45 mm

OTHER

- ▶ Developed in Slovenia, EU
- ▶ 2 - year warranty
- ▶ CE certified

Controllers / Automation Stations

U-DDC

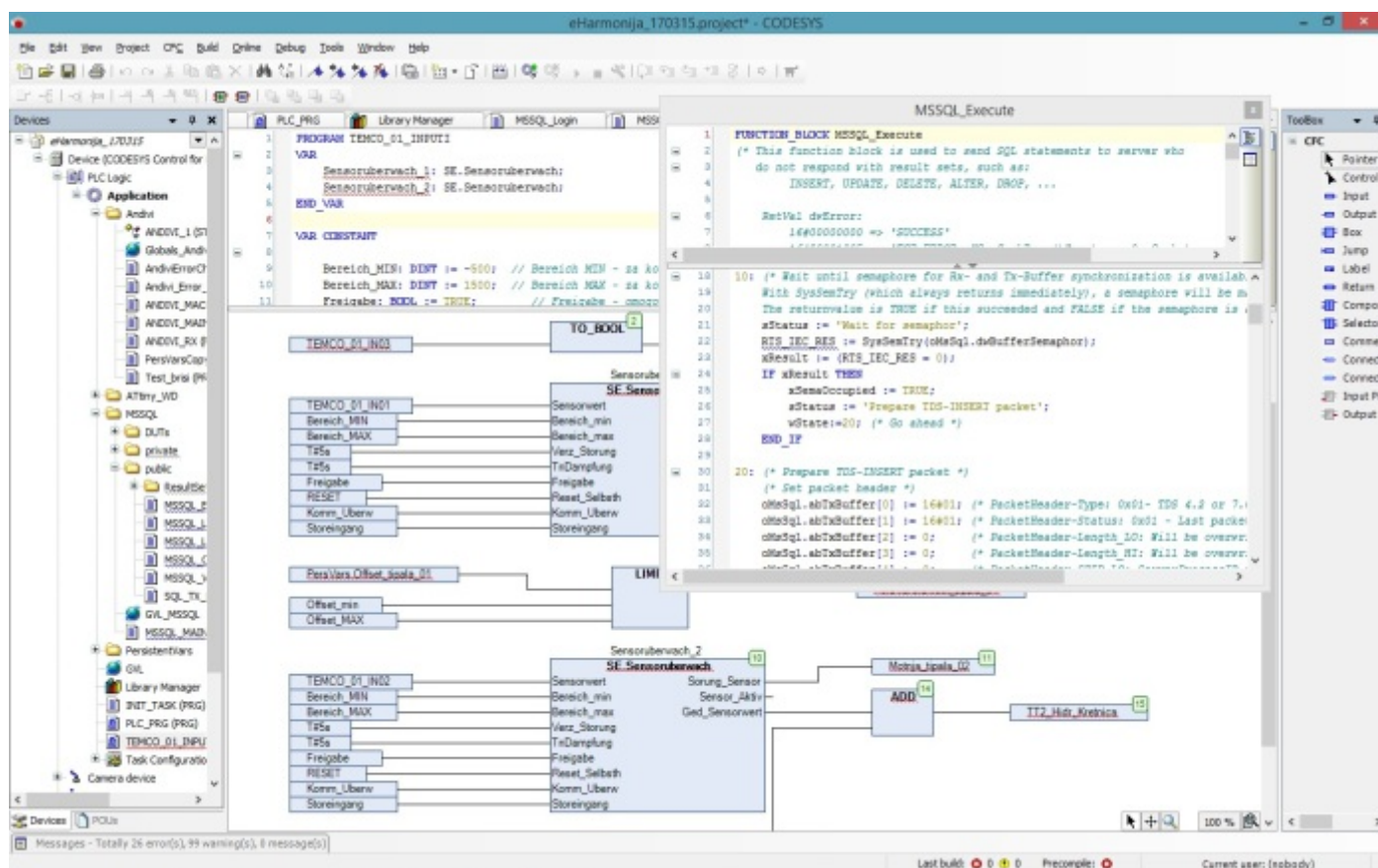
SIMPLE & EASY PROGRAMMING

See an example of combined graphical and textual programming with Codesys IEC61131 Software (www.codesys.com) below.

LEARN TO PROGRAM U-DDC AT OUR WORKSHOPS

We created the Workshops to give the integrators a meaningful way to integrate the U-DDC Automation Station / Controller Andivi to their projects. At these Workshops, we will teach you how to fully set-up and configure the U-DDC for different project needs.

Take what you learn at the Andivi Workshop and apply it in your own way. U-DDC's powerful hardware & software capabilities will enable you to cover any of your client's demands.



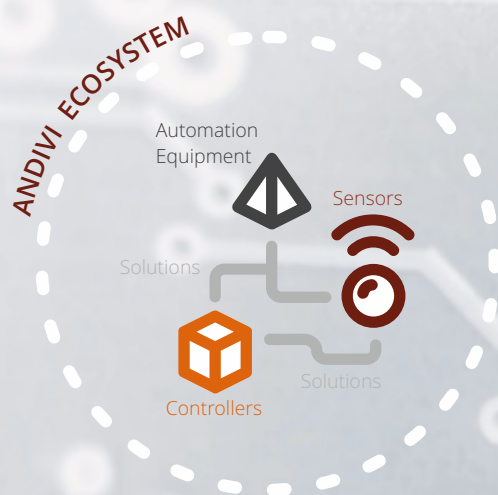
Screenshot of Codesys IEC61131 Software, which is used to program Andivi U-DDC and U-DDC KNX controllers.

I/O Units

Products	Controllers / Automation Stations	13
	▶ I/O Units	17
	Thermostats	21
	Electronic Hotel Door Locks	29
	Intelligent Hotel Room Equipment	37
	Sensors	45
Solutions	Hotel Room Solutions	77
	VIA Smart Home	85
	VIA Building & Energy Management	93

BUILDING
INTELLIGENCE
THE WAY YOUR
BUILDING
WANTS
IT.

andivi

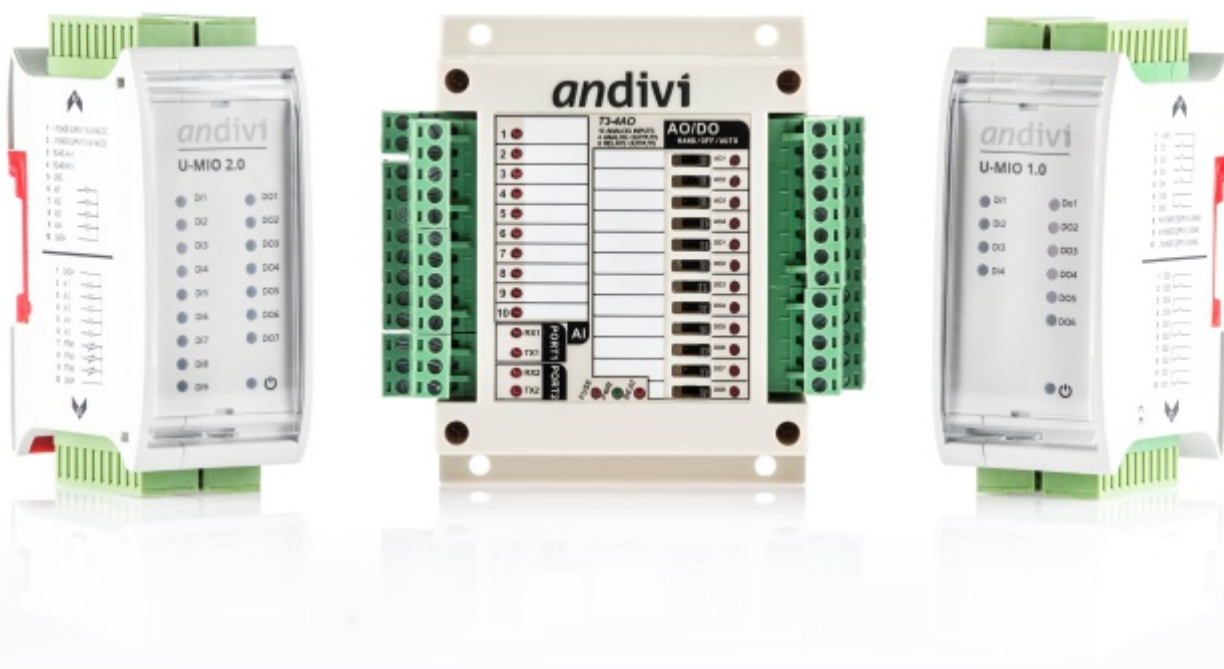


I/O Units

U-MIO

Andivi Input/Output UNIT U-MIO is a universal INPUT/OUTPUT module. It supports local I2C bus connection and standard Modbus RTU/RS-485 connection.

It can be used to control pumps, valves, ventilators, shades, lights etc. and to capture temperature, statuses, values from different sensors/devices.



OPTIONS

Andivi U-MIO 1.0

Input: 3 × analog, 3 × analog PT1000, 4 × digital

Output: 3 × analog, 6 × digital

Power supply: 85-264VAC, max. 10W

Andivi U-MIO 2.0

Input: 5 × analog, 3 × analog PT1000, 9 × digital

Output: 4 × analog, 7 × digital

Power supply: 15-24VAC/DC, max. 5W

Andivi U-MIO 3.0

Universal input: A/D (Analog/Digital) 10 ×

Output: 4 × analog, 8 × digital

Power supply: 12-24VAC/DC, max. 3W

HIGHLIGHTS

- ▶ Excellent value for money.
- ▶ Areas of Application: used to control pumps, valves, fans, shades, lights ... and to capture temperature, statuses, values from different sensors/devices.

OTHER

- ▶ Developed in Slovenia, EU.
- ▶ 2 - year warranty.
- ▶ CE certified.

I/O Units

U-MIO

TECHNICAL DATA

Andivi U-MIO 1.0

NEW
in 2016!

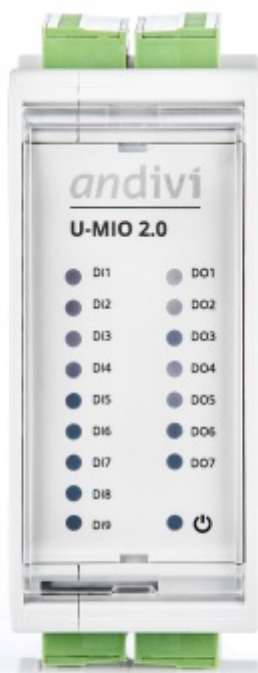
- ▶ Analog input: 3×, 0-10 V
- ▶ Analog input: Pt1000: 3×, -30 do +170°C
- ▶ Analog output: 3×, 0-10V
- ▶ Digital input: (optically isolated): 4×
- ▶ Digital output: 6×, relay 230VAC 3A
- ▶ Communication: RS-485 Modbus communication (slave device)
- ▶ Communication: RS-485 communication with control panel
- ▶ Connection: BUS local connection with U-DDC automation station over integrated connection system on DIN rail
- ▶ Connection: DIN inline or stand alone
- ▶ Power Supply: 85-264VAC, max. 10W
- ▶ Mounting: DIN rail
- ▶ Dimensions (L × W × H): 101 × 80 × 45mm



Andivi U-MIO 2.0

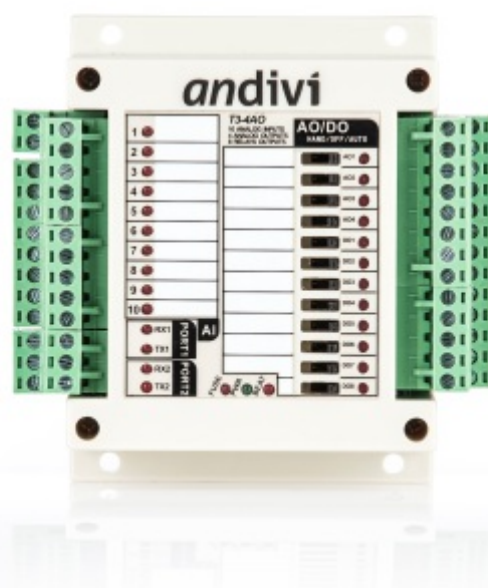
NEW
in 2016!

- ▶ Analog input: 5×, 0-10 V
- ▶ Analog input: Pt1000: 3×, -30 do +170°C
- ▶ Analog output: 4×, 0-10V
- ▶ Digital input: (optically isolated): 9×
- ▶ Digital output: 7×, relay 230VAC 6A
- ▶ Communication: RS-485 Modbus communication (slave device)
- ▶ Connection: BUS local connection with U-DDC automation station over integrated connection system on DIN rail
- ▶ Connection: DIN inline or stand alone
- ▶ Power Supply: 15-24VAC/DC, max. 5W
- ▶ Mounting: DIN rail
- ▶ Dimensions (L × W × H): 101 × 80 × 45mm



Andivi U-MIO 3.0

- ▶ Universal input: 10×, 0-10V / 0-20mA / NTC10k / dry contact
- ▶ Analog output: 4×, 0-10V
- ▶ Digital output: 8×, relay 120VAC 2A
- ▶ Communication: RS-485 Modbus communication (slave device)
- ▶ Power Supply: 12-24VAC/DC, Max. 3W
- ▶ Mounting: DIN rail or panel mount
- ▶ Dimensions (L × W × H): 115 × 90 × 40mm



Developed
in Slovenia, EU!

Andivi Product & Solutions

Thermostats

Products

Controllers / Automation Stations 13

I/O Units 17

▶ **Thermostats 21**

Electronic Hotel Door Locks 29

Intelligent Hotel Room Equipment 37

Sensors 45

Solutions

Hotel Room Solutions 77

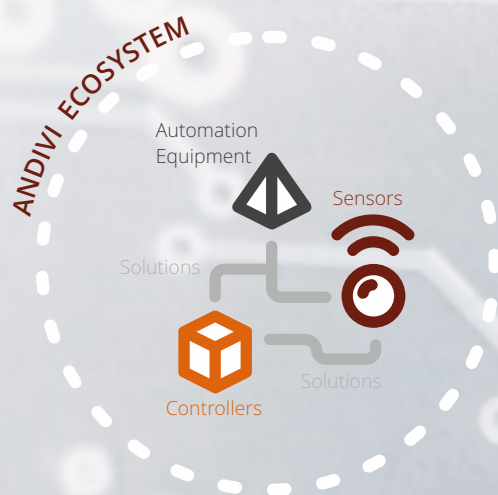
VIA Smart Home 85

VIA Building & Energy Management 93

www.andivi.com

BUILDING
INTELLIGENCE
THE WAY YOUR
BUILDING
WANTS
IT.

andivi



Thermostats

TRB Thermostats

DESCRIPTION

TRB digital programmable thermostats for fan control and temperature setting come in various versions: 2-pipe/4-pipe, 2-wired or 3-wired motorized Valve or 0-10V Valve Actuator and with **RS485**, **Modbus** or **Wi-Fi** communication.

The TRB series of room thermostats comes with these serial features: clock, weekly programmable, memory function. Designs come in alpine white or ultra black.

TYPES

- ▶ TRB-AL
- ▶ TRB-ALNK
- ▶ TRB-ALWK
- ▶ TRB-EL
- ▶ TRB-ELN
- ▶ TRB-ELW
- ▶ TRB-MLK

TECHNICAL DATA

TRB THERMOSTAT SERIES		AL	ALNK	ALWK	EL	ELN	ELW	MLK
STAGING	Heating/cooling	✓						
	Cooling Only	✓						
APPLICATION	2- Pipe	✓	✓	✓				✓
	4- Pipe				✓	✓	✓	
	2-Wired Motorized Valve	✓	✓	✓	✓	✓	✓	✓
	3-Wired Motorized Valve	✓	✓	✓	✓	✓	✓	✓
	0-10V Valve Actuator							✓
	Fan control	Turn off & turn to low speed						
COMMUNICATION	Modbus RTU & RS485		✓			✓		
	Wi-Fi			✓			✓	
LOAD	Current Load for Valve	3A						
	Current Load for Fan	5A						
POWER	Power Supply	230VAC						
FEATURES	Memory	✓						
	Clock	customizable (programmable)						
	Weekly Programmable	5 + 2 days						
	Keycard		✓	✓				✓
	Lock	✓						
	Sleep	✓						
DISPLAY	Time display	12h or 24h						
	Temperature display	Set temp. and current temp. OR display set temp. only						
DESIGN	Color	Black or White						
	Backlight	White						
	Buttons	Touch						
INSTALLATION	Installation	86×86mm and 60mm European box						

DESIGN



TRB in white



TRB in black

Thermostats

TRB Thermostats

HIGHLIGHTS

- ▶ **Excellent value.**
Thermostats from the Andivi TRB Series are rich on features and powerful in performance. Overall: excellent value for money.
- ▶ **Sleek Design.**
Elegant thin design with large display and light blue backlight. Comes in alpine white or ultra black colors and a chrome trim.
- ▶ **Smart thermostat.**
Andivi TRB Thermostats come with several communication varieties as a WiFi thermostat or a Modbus RS485 thermostat.
- ▶ **Quick & Easy installation.**

OTHER

- ▶ Acrylic surface, **resistant against scratches.**
- ▶ **Capacitive touch** buttons for easy control.
- ▶ **Temp. control** accuracy: 0.5°C
- ▶ **Sensor:** NTC 3950, 100K
- ▶ **Temperature range:** 5 - 35°C
- ▶ **Power consumption:** <1.5 W
- ▶ **Housing:** PC + ABS (fireproof)
- ▶ **Dimensions:** 86 × 86 × 13.3 mm
- ▶ **Working temperature:** 0 ~ 45 °C
- ▶ **5 ~ 95% RH** (non-condensing)
- ▶ **Storage temperature:** -5 ~ 55 °C



Thermostats

TRB Thermostats



Thermostats

TRC Thermostats

MULTI-PURPOSE THERMOSTAT

Andivi TRC-A/D room controller is a multi-purpose programmable room thermostat used to control temperature and fan speed.

With its unique intelligent thermodynamic algorithm it enables enhanced room comfort while using less energy.

USE

It is intended for managing convectors and for regulating underfloor heating, ceiling cooling systems, radiator systems and other cooling/heating elements.

MULTI-PURPOSE

Multi-purpose thermostat for manual/automatic control of fan coils, underfloor heating systems, ceiling cooling systems, radiator system and other cooling/heating elements.

CALM AIR FLOW

Comfort Fan Coil regulation (PI regulation) with minimum air flow allows a pleasant heating/cooling change.

DETECT GUEST PRESENCE

Detect guest presence in the room by directly connecting the Energy Saving Switch to the room controller: save energy while the guest is not in the room.

CENTRAL CONTROL FROM ANY PLATFORM

Monitor in-room guest presence status and control temperature in all the rooms straight from the reception.

The Andivi TRC room thermostats have the ability to be connected to every guest room in the hotel from a single platform like VIA (page 85 and 93) or other 3rd party systems.

THERMOSTAT VS. ROOM CONTROLLER

The difference between a classic thermostat and a room controller thermostat, like andivi TRC, is in its energy saving ability.

Classic thermostats do not optimize for regulation, they only turn valves on and off. Often classic thermostats overheat and overcool rooms, hence using more energy while providing a lower level of comfort.

Room controller thermostats optimize their performance by working with PI regulator functionalities. The consequence is better living conditions while saving energy over time.

TYPES

Andivi TRC-A
(Analogue)

Andivi TRC-D
(Digital)

DESIGN



Thermostats

TRC Thermostats

TECHNICAL DATA

- ▶ **Temperature range**
-30~70°C (-22~158°F)
- ▶ **Supply voltage**
24VAC ±10%, 50-60Hz (TRC-A)
230VAC ±10%, 50-60Hz (TRC-D)
- ▶ **3 × digital relay output**
Fan stages
- ▶ **2 × analog output**
0-10V – regulation valves (TRC-A)
- ▶ **2 × digital relay-output**
On/Off Valve (TRC-D)
- ▶ **Communication interface**
Modbus/RTU RS485
- ▶ **Temperature sensor**
Integrated internal, optional external
- ▶ **Active temperature sensor selection**
Internal, external, average value of both
- ▶ **Protect mode digital input**
Included
- ▶ **Economy mode digital input**
Included
- ▶ **Fan coil system**
2-pipe/4-pipe
- ▶ **Fan control**
Manual/automatic
- ▶ **Heating/cooling change-over**
Manual/automatic
- ▶ **Temperature setting**
0-50°C
- ▶ **Actual temperature indication**
0-50°C
- ▶ **Temperature indication step**
0,1°C
- ▶ **Temperature set-point step**
0,5 °C
- ▶ **Temperature regulation**
PI regulation (TRC-A), P regulation (TRC-D)
- ▶ **Fan coil regulation**
Pi regulation
- ▶ **Operating conditions**
0~50°C, 5-95%rh
- ▶ **Fan coil relay outputs and on/off valves**
1A/250VAC, inductive load
- ▶ **Life cycle of relay contacts**
100.000 cycles
- ▶ **Direct output control**
Over Modbus
- ▶ **Power supply**
24VAC, 50/60Hz (TRC-A), 230VAC, 50/60Hz (TRC-D)



TRC Thermostat

Thermostats

TRC Thermostats



Si.mobil headquarters, Ljubljana | <https://www.simobil.si/>



Lifeclass Hotel Apollo****, Portorose | <http://www.lifeclass.net/en/>

Andivi Product & Solutions

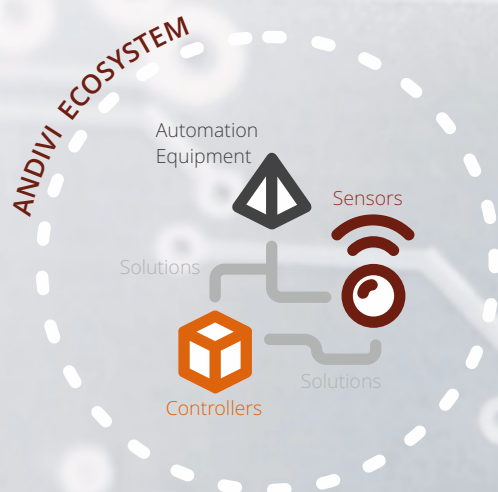
Electronic Hotel Door Locks

Products	Controllers / Automation Stations	13
	I/O Units	17
	Thermostats	21
	▶ Electronic Hotel Door Locks	29
	Intelligent Hotel Room Equipment	37
	Sensors	45
Solutions	Hotel Room Solutions	77
	VIA Smart Home	85
	VIA Building & Energy Management	93

www.andivi.com

BUILDING
INTELLIGENCE
THE WAY YOUR
BUILDING
WANTS
IT.

andivi



Electronic Hotel Door Locks

NDV Electronic Hotel Door Locks

Andivi Hotel Electronic Door Locks are **carefully crafted** of durable metal and plastic materials with **easy maintenance surface finish**.

The lock latches meet all international standards in safety and reliability.

OPTIONS

Color

Silver or gold finish

Mortise

ANSI or Euro

HIGHLIGHTS

- ▶ Applicable to many building types
- ▶ RFID Mifare contactless technology
- ▶ Safety
- ▶ No wires
- ▶ Economical
- ▶ Easy maintenance
- ▶ Low voltage alarm
- ▶ Real time clock
- ▶ Memory
- ▶ Reliable system with mechanical key backup
- ▶ Anti-burglar system
- ▶ Anti-panic function
- ▶ Shock durability more than 1000 kg



TECHNICAL SPECIFICATIONS

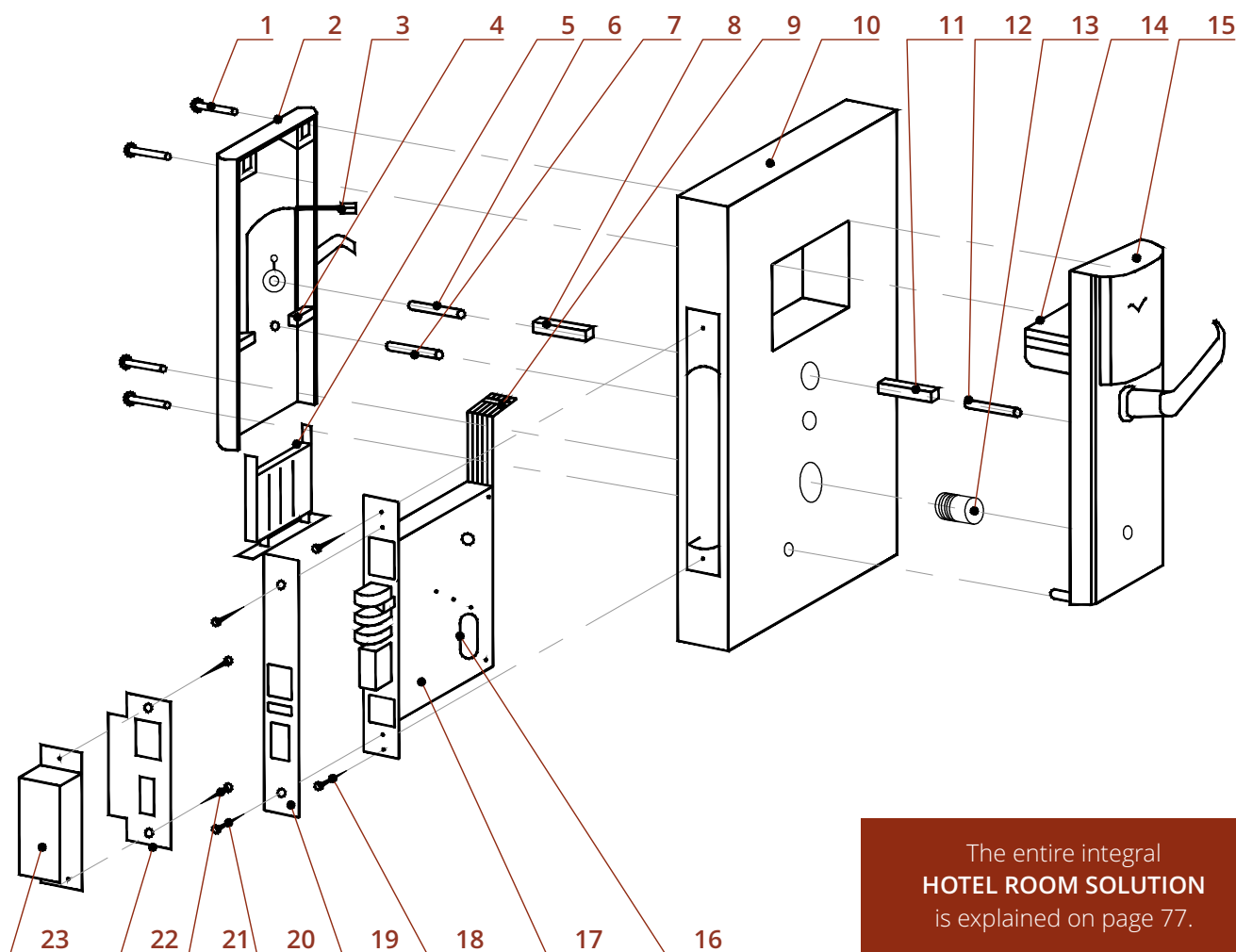
- ▶ **Applicability**
Andivi Electronic Hotel Door Locks are suitable for any hotel, but also for any apartment or office building, staff areas in any commercial building, they are even applicable in private villas.
- ▶ **RFID Mifare contactless technology**
Built-in reader for contactless RFID Mifare 13.56 MHz cards.
- ▶ **Safety**
Effective enhancement of the hotel door-lock safety: if a card is lost, the cipher-code of the whole lock system can be modified quickly and easily with a System Card, so possible finders of the lost hotel card can not enter the room.
- ▶ **No wires**
The electronic door-locks are power independent (powered by standard AA batteries) and thus indifferent to lack of UPS system or power shortages. This way, the system is very reliable, not risking guest's comfort nor safety in case of short circuits or faults in the electrical system due to weather or other unpredictable conditions.
- ▶ **Economical**
Built-in micro motors are reliable and of low power consumption.
- ▶ **Easy maintenance**
A "Low voltage alarm" goes off discreetly before the batteries need changing, leaving the maintenance staff enough time to renew the stock and have new batteries at hand when they will need changing.
- ▶ **Real Time Clock**
The door-locks feature an inner real time clock; guest cards will be terminated automatically when the leaving time comes; the staff card can choose the unlocking time.
- ▶ **Memory**
One lock can memorize the latest 200 entries, which can be checked and printed.
- ▶ **Reliability**
Every door-lock has its own mechanical key that unlocks it in case the electronic system fails to operate.
- ▶ **Anti-burglar system**
All door-locks come with an anti burglar bolt.
- ▶ **Anti-panic function**
The anti-panic function enables quick opening of doors from inside at any time, in emergency cases as well. This means you can open the door in closed position at all times by using the interior door handle. The latchbolt and deadbolt are retracted simultaneously while the exterior side of the door-lock remains locked.

Electronic Hotel Door Locks

NDV Electronic Hotel Door Locks

TECHNICAL AND ENVIRONMENTAL REQUIREMENTS

- ▶ **Adaptable to door thickness:** 38 ~ 50 mm
- ▶ **Working temperature:** -20 ~ +50°C
- ▶ **Humidity:** ≤95%, without corrosive gas and dust
- ▶ **Power Supply:** DC6V, 4 × AA alkaline batteries
- ▶ **Low power alarm** at 4.8V ±3%
- ▶ **Weight:** ~ 3 kg
- ▶ **CE** certified

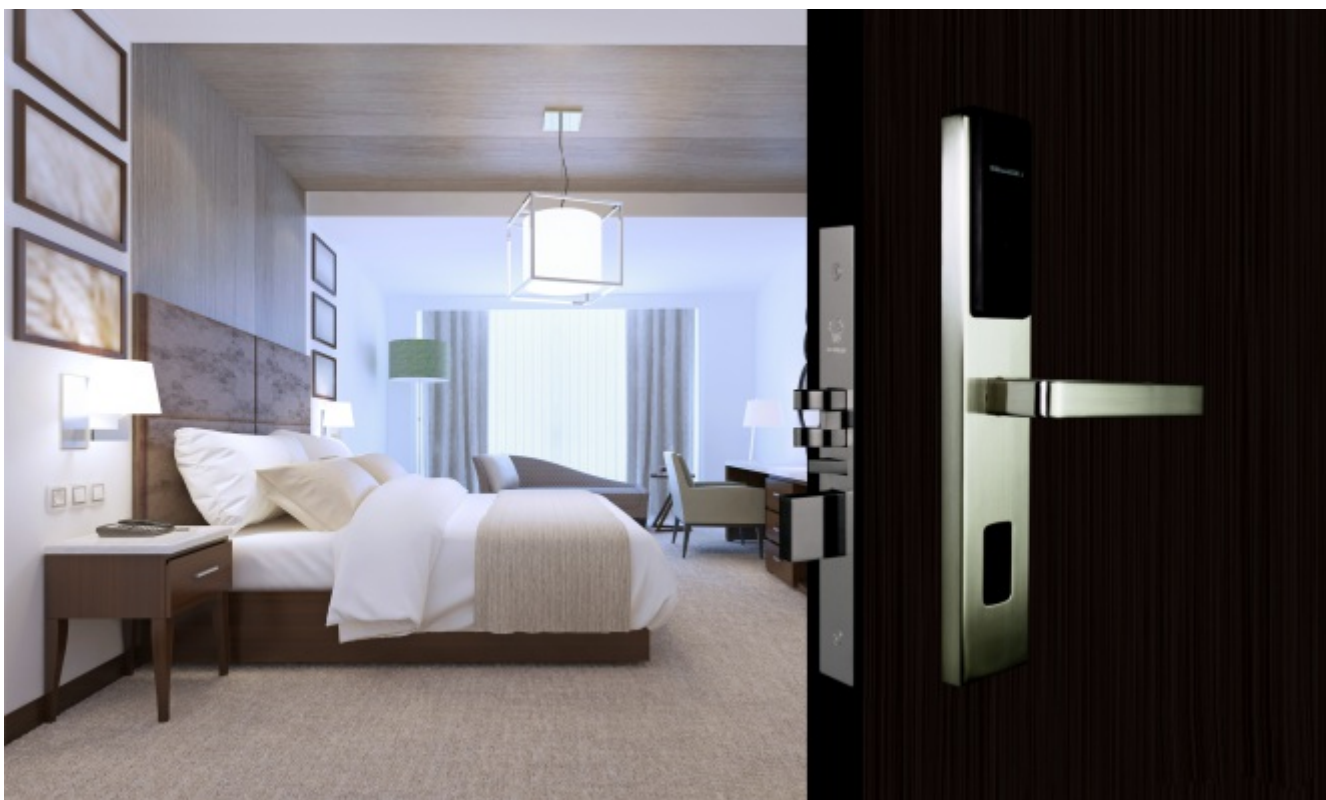


LOCK INSTALLATION

- | | | |
|-----------------------------|------------------------|---------------------------|
| 1 Cross screw M5*(45,50,55) | 9 Lock body plug | 17 Lock body |
| 2 Lock rear panel | 10 Wooden door | 18 Wood cross screw M4*25 |
| 3 Power plug | 11 Handle square shaft | 19 Side plate |
| 4 Power pin | 12 Handle spring | 20 Cross screw M4* |
| 5 Battery box | 13 Lock head | 21 Cross screw M4* |
| 6 Behind handle spring | 14 Main board | 22 Locking parts |
| 7 Small square shaft | 15 Lock panel | 23 Plastic housing |
| 8 Handle square shaft | 16 Lock head screw | |

Electronic Hotel Door Locks

NDV Electronic Hotel Door Locks



NDV - Slim

NDV - Basic



Electronic Hotel Door Locks

NDV-Basic

DESCRIPTION

Andivi NDV-Basic electronic hotel door lock is a sturdy door-lock, made of highest quality metal and plastic materials. The basic model is popular with its neutral simple design. Applicable to many building types, it can be used in a wide variety of projects. Modern contactless RFID technology smoothly operates with standard Mifare cards. All Andivi electronic hotel door locks are fully compatible with Andivi 360° Solution for hotel rooms.

TECHNICAL DATA

- ▶ **Shell material:** stainless steel, easy maintenance matte finish.
- ▶ **Built-in RFID reader** for contactless Mifare 13.56 MHz cards.
- ▶ **ANSI mortise.**
Adaptable to door thickness: 38 ~ 55 mm, door frame width: ≥ 120 mm.
Optional: Euro mortise for door thickness: 34 ~ 55 mm, door frame width: ≥ 90 mm
- ▶ **Anti-panic function.**
- ▶ **Anti-burglar bolt.**
- ▶ **Shock durability:** more than 1000 kg
- ▶ **Working temperature:** $-20 \sim +50^{\circ}\text{C}$
- ▶ **Humidity:** $\leq 95\%$, without corrosive gas and dust
- ▶ **Power Supply:** DC6V, 4×AA alkaline batteries
- ▶ **Low power alarm** at $4.8\text{V} \pm 3\%$
- ▶ **Weight:** ~ 3 kg
- ▶ **Dimensions:** 249×56 (151.5 with handle) mm
- ▶ **CE certified.**

TYPES

Andivi NDV-Basic-S
(Silver surface finish)

Andivi NDV-Basic-G
(Gold surface finish)

DESIGN



NDV-Basic-G



NDV-Basic-S

Electronic Hotel Door Locks

NDV-High

DESCRIPTION

Model Andivi NDV-High is a sturdy door-lock, made of highest quality metal and plastic materials and has a recognisable modern design with a slightly embossed card reader area. Applicable to many building types, it can be used in a wide variety of projects. Modern contactless RFID technology smoothly operates with standard Mifare cards. All Andivi electronic hotel door locks are fully compatible with Andivi 360° Solution for Hotel Rooms (page 77).

TECHNICAL DATA

- ▶ **Shell material:** stainless steel, easy maintenance matte finish
- ▶ **Built-in RFID reader** for contactless Mifare 13.56 MHz cards
- ▶ **ANSI mortise.**
Adaptable to door thickness: 38 ~ 55 mm, door frame width: ≥ 120 mm
- ▶ **Anti-panic function**
- ▶ **Anti-burglar bolt**
- ▶ **Shock durability:** more than 1000 kg
- ▶ **Working temperature:** $-20 \sim +50^{\circ}\text{C}$
- ▶ **Humidity:** $\leq 95\%$, without corrosive gas and dust
- ▶ **Power Supply:** DC6V, 4xAA alkaline batteries
- ▶ **Low power alarm** at $4.8\text{V} \pm 3\%$
- ▶ **Weight:** ~ 3 kg
- ▶ **Dimensions:** 269×77 (157.3 with handle) mm
- ▶ **CE certified**

TYPES

Andivi NDV-High-S
(Silver surface finish)

Andivi NDV-High-G
(Gold surface finish)

DESIGN



NDV-High-G



NDV-High-S

Electronic Hotel Door Locks

NDV-Slim

DESCRIPTION

NDV-Slim door-locks are sturdy electronic door-locks made of highest quality metal and plastic materials. Applicable to many building types, the slim design stands out with its slender appearance and can thus be used in a wide variety of projects.

Modern contactless RFID technology smoothly operates with standard Mifare cards.

All Andivi electronic hotel door locks are fully compatible with Andivi 360° Solution for Hotel Rooms (page 77).

TECHNICAL DATA

- ▶ **Shell material:** stainless steel, easy maintenance matte finish
- ▶ **Built-in RFID reader** for contactless Mifare 13.56 MHz cards
- ▶ **ANSI mortise**
Adaptable to door thickness: 38 ~ 55 mm, door frame width: ≥ 120 mm
- ▶ **Anti-panic function**
- ▶ **Anti-burglar bolt**
- ▶ **Shock durability:** more than 1000 kg
- ▶ **Working temperature:** $-20 \sim +50^{\circ}\text{C}$
- ▶ **Humidity:** $\leq 95\%$, without corrosive gas and dust
- ▶ **Power Supply:** DC6V, 4×AA alkaline batteries
- ▶ **Low power alarm** at $4.8\text{V} \pm 3\%$
- ▶ **Weight:** ~ 3 kg
- ▶ **Dimensions:** 280×50 (135 with handle) mm
- ▶ **CE certified**

TYPE

Andivi NDV-Slim-S
(Silver surface finish)

DESIGN



NDV-High-S

Andivi Product & Solutions

Intelligent Hotel Room

Products

Controllers / Automation Stations 13

I/O Units 17

Thermostats 21

Electronic Hotel Door Locks 29

► **Intelligent Hotel Room Equipment 37**

Sensors 45

Solutions

Hotel Room Solutions 77

VIA Smart Home 85

VIA Building & Energy Management 93

www.andivi.com

Intelligent Hotel Room Equipment

All Intelligent Hotel Room Equipment



Hotel Electronic Door Lock



External Card Reader



Access Control Power Supply



Electric Strike



Energy Saving Switch



Card Encoder



Hotel Guest Card



The entire integral
HOTEL ROOM SOLUTION
is explained on page 77.

Intelligent Hotel Room Equipment

External Card Reader

DESCRIPTION

The external RFID NDV-WRFID reader **is built into the wall**, directly adjacent to a door of the hotel room. When a guest approaches the reader with the contactless card, which is coded specifically for a given room, the hotel door opens automatically.

The NDV-WRFIDk type can be programmed to 200 different cards with the same access restrictions and is very applicable in student dorms or parts of commercial buildings **where limited access is required**, for example to dining/fitness and other areas.

The entire integral
HOTEL ROOM SOLUTION
is explained on page 77.

TECHNICAL DATA

- ▶ **Housing:** Plastic, IP20 (Optional: IP65)
Indoor use (optional outdoor use).
- ▶ **Power Supply:** 12V DC
- ▶ **Card type:** Mifare 13.56 Mhz
- ▶ **Reading range:** 3-7cm
- ▶ **Size:** 73×113×15mm
- ▶ **Weight:** 83 g

TYPES

Andivi NDV-WRFID
(Programmable with software, for hotels)

Andivi NDV-WRFIDk
(Programmable with programming card)

DESIGN



Intelligent Hotel Room Equipment

Access Control Power Supply

DESCRIPTION

The access control power supply supplies electrical power to the electric strike. It has a timer that limits the time the strike is released and allows the door to be opened.

The entire integral
HOTEL ROOM SOLUTION
is explained on page 77.

TECHNICAL DATA

- ▶ **Input voltage:** 110 ~ 240V AC
- ▶ **Input Frequency:** 50-60Hz
- ▶ **Output voltage:** DC12V
- ▶ **Output current:** 3A
- ▶ **Output voltage trim range:**
±10% ~ ±15% Load: 1% typical
- ▶ **Output stability:** 0.5% typical
- ▶ **Ripple and noise:** 1%, peak to peak
100mVp-p typical
- ▶ **Insulation voltage:** Junior/sub-polar
inter-1500 V AC, primary/shell
between 1500 V AC, sub-polar/shell
between 500V AC
- ▶ **Hold Time:** full load typically 20ms
- ▶ **Operating temperature:**
-20°C ~ +65°C
- ▶ **Overload protection:** All outputs in a
short circuit are overload protected;
power output of 0-15 seconds delay
locks
- ▶ **Outer steel case size:** 105×9×34mm
- ▶ **Weight:** 311g
- ▶ **Attention:** to prevent overload, an
electronically controlled lock must be
set to 0 seconds delay.

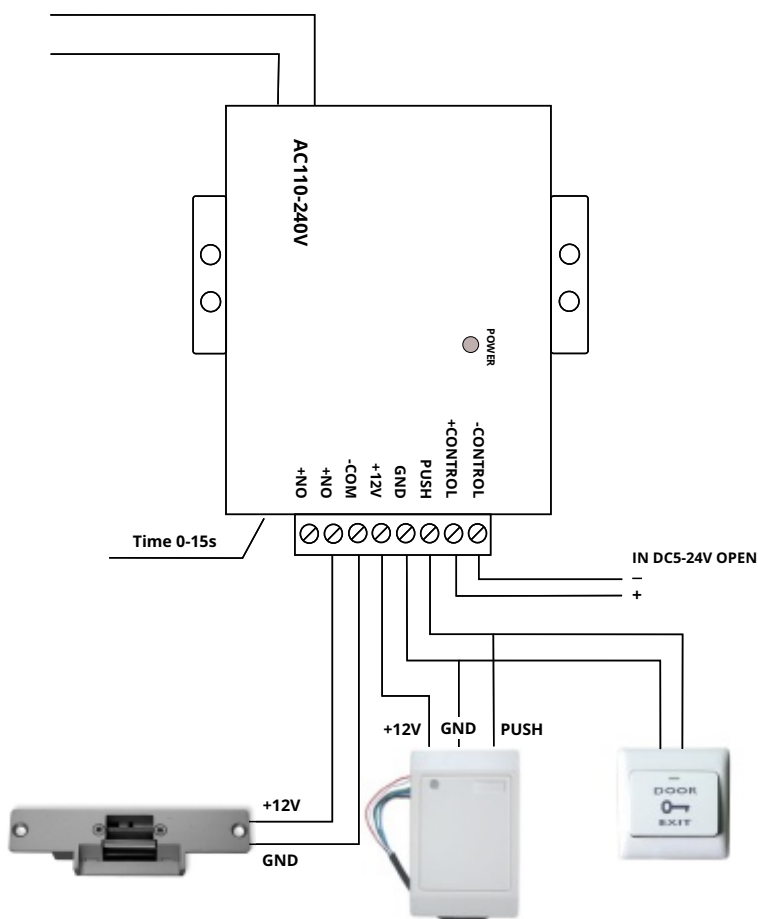
TYPE

Andivi NDV-PS
(Access Control Power Supply)

DESIGN



Wiring diagram:



Intelligent Hotel Room Equipment

Electric Strike

DESCRIPTION

The electric strike NDV-ES **needs to be powered** with an access control power supply (like Andivi NDV-PS). There, the timeout can be set which determines, for how long a door can be opened before the strike returns to locked mode.

NDV-ES can be combined with almost **endless possibilities of door handles or door knobs** in **various materials and designs**.

The entire integral
HOTEL ROOM SOLUTION
is explained on page 77.

TECHNICAL DATA

- ▶ **Material:** Stainless steel
- ▶ **Face plate:** 150×39,5×34 mm (l×w×h)
- ▶ **Voltage:** 12V DC
- ▶ **Current:** NO 450mA, NC 200mA
- ▶ **Feature:** Fail secure (NO)
Fail safe (NC)
- ▶ **Weight:** 319g
- ▶ **Suitable for wooden doors.**

TYPE

Andivi NDV-ES
(Electric Strike)

DESIGN



Intelligent Hotel Room Equipment

Energy Saving Switch

DESCRIPTION

Upon arrival the hotel guest card is placed in the NDV-ESS1 energy saving switch, which **activates the in-room power supply**, sets the AC into Comfort mode, allows switching on the lights in the room and controlling the window blinds. When the card is withdrawn from the energy saving switch for a certain period of time, the power turns off, air conditioning is reset to Economy mode, the lights are turned off and the blinds' controls disabled. An indispensable part of equipment that **helps hotels save significant amounts of energy**.

The entire integral
HOTEL ROOM SOLUTION
is explained on page 77.

TECHNICAL DATA

- ▶ **IP20 plastic housing.**
- ▶ **Voltage:** 180-250V
- ▶ **Power:** 40A
- ▶ **Mounting:** standard 86×86mm mounting box
- ▶ **Power cuts off automatically**, when the card is removed for more than 15 seconds.
- ▶ **Only Mifare cards can activate the power supply.**

TYPE

Andivi NDV-ESS1
(Energy Saving Switch)

DESIGN



Intelligent Hotel Room Equipment

Card Encoder

DESCRIPTION

The reception is equipped with a card encoder, which **can record the relevant data on smart cards and contactless cards**. Hotel-room-specific cards can be encoded, time limitations of access can be determined, prolonged or shortened, lost cards can be cancelled.

The entire integral
HOTEL ROOM SOLUTION
is explained on page 77.

TECHNICAL DATA

- ▶ Plastic housing.
- ▶ Power and data transfer by USB.
- ▶ Encoding software is included in the solution.
- ▶ **Size:** 100×140×30 mm (w×l×h)
- ▶ **Weight:** 350 g

TYPE

Andivi NDV-E1
(Card Encoder)

DESIGN



Intelligent Hotel Room Equipment

Hotel Guest Card

DESCRIPTION

NDV-M are Mifare cards, **standard contactless RFID proximity cards**. Each card is programmed to a single hotel room and can be reprogrammed several thousand times. If a card is lost, it can be cancelled in the hotel software immediately. Cards can be blank (white), or they can be customized according to your own design or brand identity.

The entire integral
HOTEL ROOM SOLUTION
is explained on page 77.

TECHNICAL DATA

- ▶ **Operating frequency:** 13.56 Mhz
- ▶ **Working temperature:** -20°C ~ +50°C
- ▶ **Anti-collision mechanism** supports multi-card operation. You can keep the Mifare card together with other cards without risking interference or data loss.
- ▶ **Fast data transfer:** 106 kbps
- ▶ Divided into 16 sectors with 4 blocks each (one block consists of 16 bytes).
- ▶ **Memory:** 1/4 kbyte
- ▶ **Operating distance:** < 10 mm
- ▶ Contactless transmission of data and energy supply (**no battery needed**).
- ▶ Each card has a unique 32 sequence number.
- ▶ **Write endurance:** 100.000 cycles.
- ▶ **Data retention:** 10 years.
- ▶ **Time of saving data:** ≥ 100 years.

TYPES

Andivi NDV-M-B
(Blank Mifare card, white, no branding)

Andivi NDV-M-P
(Printed Mifare card, custom design)

MOCK-UP

The guest card can be designed according to your preferences.

Format: 54 x 85 mm
Filetype: PDF, PSD, TIF.



DESIGN



Sensors

Products

Controllers / Automation Stations 13

I/O Units 17

Thermostats 21

Hotel Electronic Door Locks 29

Intelligent Hotel Room Equipment 37

► **Sensors 45**

Solutions

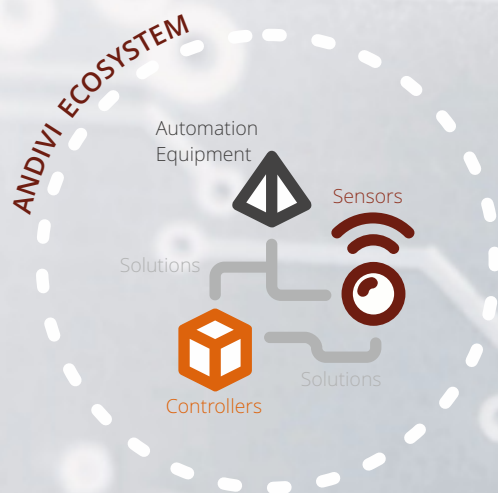
Hotel Room Solutions 77

VIA Smart Home 85

VIA Building & Energy Management 93

BUILDING
INTELLIGENCE
THE WAY YOUR
BUILDING
WANTS
IT.

andivi



Temperature Sensors

Room Temperature Sensor

DESCRIPTION

For measuring the temperature in living and office spaces, reception halls, foyers etc. The modern and plain design allows for easy and inconspicuous mounting. With the help of the respective sensors, the device can be connected to all conventional control and display systems.

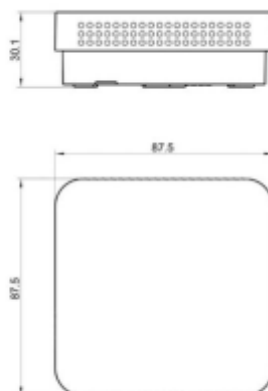
TECHNICAL DATA

- ▶ **Measuring range:** -35°C ... +70°C
- ▶ **Tmax Casing:** +100 °C
- ▶ **Sensor Type:** according to customer requirements: Pt100, Pt100 1/3DIN, Pt1000, Pt1000 1/3DIN, Ni1000, Ni1000TK5000, Fet, NTC 5k, 10k, 20k, Precon, KTY81-210, NTC 1,8kOhm, LM235Z, DS18B20
- ▶ **Switching mode:** 2-wire connection (Standard) or optional: 3-wire connection or 4-wire connection
- ▶ **Connection:** screw clamps, max. 1,5 mm²
- ▶ **Casing:** ABS in RAL 9010
- ▶ **Dimensions (L x W x H):** 87,5 x 87,5 x 30 mm
- ▶ **Protection class:** IP20

TYPE

Andivi ANDRTF3
(Room Temperature Sensor)

SKETCH



OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.



Temperature Sensors

Ceiling Temperature Sensor

DESCRIPTION

For indoor temperature measuring applications (to be flush-mounted). The sensor features a plain and modern design and is mounted to the ceiling with the help of two tension springs. With the help of the respective sensors (see below), the device can be connected to all conventional control and display systems.

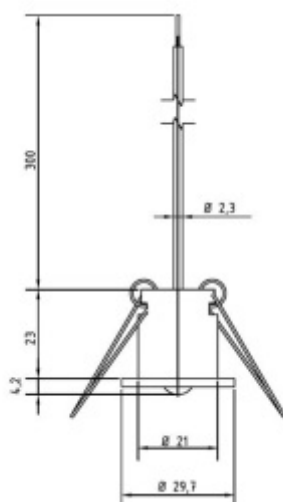
TECHNICAL DATA

- ▶ **Measuring range:** -20°C ... +90°C (standard)
- ▶ **Sensor Type** according to customer requirements: Pt100, Pt100 1/3DIN, Pt1000, Pt1000 1/3DIN, Ni1000, Ni1000TK5000, NTC 5k, 10k, 20k, Precon, NTC 1,8kOhm
- ▶ **Power supply cord:** 0,3 m PVC 2 x 0,25 mm²
- ▶ **Switching mode:** 2-wire connection (Standard)
- ▶ **Protection class:** IP20
- ▶ **Sensortype:** NTC10k

TYPE

Andivi ANDDEBF
(Ceiling Temperature Sensor)

SKETCH



OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.



Temperature Sensors

Outdoor Temperature Sensor

DESCRIPTION

Our outdoor temperature sensor is available with all common sensor types. Measurement takes place inside the sturdy and humidity-resistant plastic housing. The outdoor temperature sensor is mainly used in weather-dependent environments, such as outer walls (please avoid direct insolation). With the help of the respective sensors (see below), the device can be connected to all conventional control and display systems.

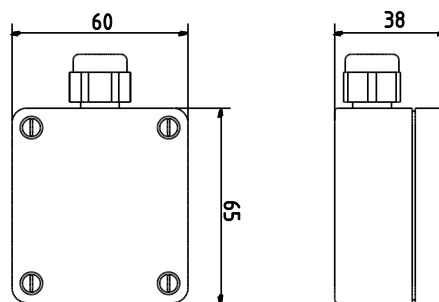
TECHNICAL DATA

- ▶ **Measuring range:** -50°C ... +100°C
- ▶ **Sensor Type:** according to customer requirements: Pt100, Pt100 1/3DIN, Pt1000, Pt1000 1/3DIN, Ni1000, Ni1000TK5000, FET NTC 5k, 10k, 20k, Precon, KTY81-210, NTC 1,8kOhm, LM235Z, DS18B20
- ▶ **Switching mode:** 2-wire connection (Standard) or optional: 3-wire connection or 4-wire connection
- ▶ **Connection:** screw clamps, max. 1,5 mm²
- ▶ **Casing:** PA6 15% GK, color RAL 9010
- ▶ **Dimensions:** 65 x 60 x 38 mm
- ▶ **Mounting equipment (included):** screws and dowels
- ▶ **Protection class:** IP65

TYPE

Andivi ANDAUTF
(Outdoor Temperature Sensor)

SKETCH



OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.



Temperature Sensors

Immersion/Duct Temperature Sensor

DESCRIPTION

For fast duct temperature measurements. Our Duct Temperature Sensors are equipped with dew point resistance by default. Gaseous media maybe measured with help of our monuting flange MF. The Immersion/Duct Temperature sensor's fields of application include heating, ventilation and refrigeration engineering as well as air-conditioning. With the help of the respective sensors, the device can be connected to all conventional control and display systems.

TECHNICAL DATA

- ▶ **Measuring range:** -50°C ... +180°C (sensor specific)
- ▶ **Tmax casing:** +100 °C
- ▶ **Sensor Type:** according to customer requirements: Pt100, Pt100 1/3DIN, Pt1000, Pt1000 1/3DIN, Ni1000, Ni1000TK5000, NTC 5k, 10k, 20k, Precon, NTC 1,8kOhm
- ▶ **Thermowell:** Ø 4 mm, lenght 200 mm (optional 50 mm ... 400 mm)
- ▶ **Switching mode:** 2-wire connection (Standard) or optional: 3-wire connection or 4-wire connection
- ▶ **Connection:** screw clamps, max. 1,5 mm²
- ▶ **Casing:** PA6 15% GK, color RAL 9010
- ▶ **Dimensions:** 65 x 60 x 38 mm
- ▶ **Protection class:** IP65
- ▶ **Response time:** 20 seconds
- ▶ **Mounting equipment (optional):** mounting flange, compression fittings

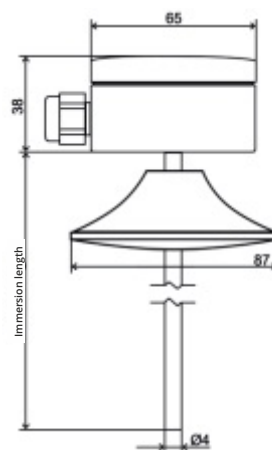
TYPE

Andivi ANDKNTF
(Immersion Duct Temperature Sensor)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Temperature Sensors

Cable / Surface Temperature Sensor

DESCRIPTION

Apparatus for measuring the temperature in gaseous media. In combination with an immersion sleeve, the cable / surface temperature sensor can also be used for measuring the temperature of liquid media (as in pipes, kettles or water tanks). With the help of the respective sensors, the device can be connected to all conventional control and display systems. The versions with PVC and Silicone connections feature a double roller-burnished sleeve as standard. The fibre glass/VA version is hexagon-shaped. Note: The version with fibre glass connection can not be equipped with WPC.

TECHNICAL DATA

- ▶ **Measuring range:**
PVC (up to 105 °C)
Silicone (up to 180 °C)
High-temp. silicone (up to 250 °C)
Fibre glass (up to 400 °C)
- ▶ **Sensor Type:** according to customer requirements: Pt100, Pt100 1/3DIN, Pt1000, Pt1000 1/3DIN, Ni1000, Ni1000TK5000, NTC 5k, 10k, 20k, Precon, KTY81-210, NTC 1,8kOhm, LM235Z, DS18B20 display systems.
- ▶ **Switching mode:** 2-wire connection (Standard) or optional: 3-wire connection or 4-wire connection
- ▶ **Connection:** core-end sleeves
- ▶ **Power Supply cord:** 2 m
- ▶ **Fitting length:** 6 x 50 mm
- ▶ **Protection class:** IP65 (Standard)

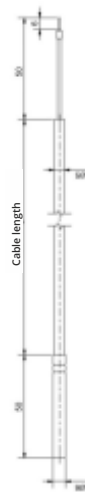
TYPE

Andivi ANDKBTf
(Cable / Surface Temperature Sensor)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Temperature Sensors

Contact Temperature Sensor ⁽¹⁾

DESCRIPTION

For measuring the temperature on round surfaces such as pipes. There are two sensor types available. Both are equipped with an aluminum prism and delivered with a tension band, allowing for easy and fast mounting on round surfaces such as cold and hot water pipes. With the help of the respective sensors, the device can be connected to all conventional control and display systems.

TECHNICAL DATA

Andivi U-ANT-1

- ▶ **Measuring range:** -50°C ... +100°C
- ▶ **Tmax. casing:** -50°C ... +100°C
- ▶ **Sensor Type:** according to customer requirements: Pt100, Pt100 1/3DIN, Pt1000, Pt1000 1/3DIN, Ni1000, Ni1000TK5000, NTC 5k, 10k, 20k, Precon, KTY81-210, NTC 1,8kOhm, LM235Z, DS18B20
- ▶ **Switching mode:** 2-wire connection (Standard) or optional: 3-wire connection or 4-wire connection
- ▶ **Connection:** screw clamps, max. 1,5 mm²
- ▶ **Casing:** PA6 15% GK, color RAL 9010
- ▶ **Dimensions:** 65 x 60 x 38 mm
- ▶ **Protection class:** IP65
- ▶ **Mounting equipment (included):** tension band

Andivi U-ANT-2

- ▶ **Measuring range:** -50°C ... +105°C
- ▶ **Sensor Type:** according to customer requirements: Pt100, Pt100 1/3DIN, Pt1000, Pt1000 1/3DIN, Ni1000, Ni1000TK5000, NTC 5k, 10k, 20k, Precon, KTY81-210, NTC 1,8kOhm, LM235Z, DS18B20
- ▶ **Switching mode:** 2-wire connection (Standard) or optional: 3-wire connection or 4-wire connection
- ▶ **Connection:** Core-end sleeves
- ▶ **Power Supply Cord:** 2m PVC (standard)
- ▶ **Casing:** Aluminum sleeve
- ▶ **Dimensions:** 29 x 15 mm
- ▶ **Protection class:** IP54
- ▶ **Mounting equipment (included):** tension band

TYPE

Andivi ANDANTF1

(Contact Temperature Sensor - PA6)

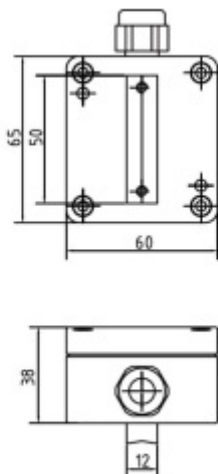
Andivi ANDANTF2

(Contact Temperature Sensor - aluminium)

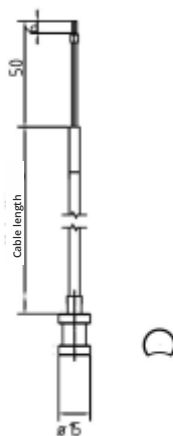
OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Andivi U-ANT-1



Andivi U-ANT-2



Andivi U-ANT-1



Andivi U-ANT-2

Temperature Sensors

Contact Temperature Sensor ⁽²⁾

DESCRIPTION

For measuring the temperature on round surfaces such as pipes. The sensors are available as stainless steel and brass versions. The rounded egde at the end of the sensor and the included tension band allow for easy mounting on pipes. With the help of the respective sensors, the device can be connected to all conventional control and display systems. A tension band is included in the delivery.

TECHNICAL DATA

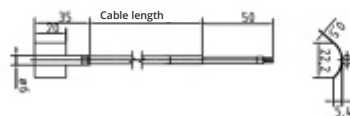
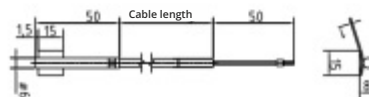
- ▶ **Measuring range:**
Andivi U-ANT-3V: -50°C ... +100°C
Andivi U-ANT-3M: -50°C ... +100°C
- ▶ **Sensor Type:** according to customer requirements: Pt100, Pt100 1/3DIN, Pt1000, Pt1000 1/3DIN, Ni1000, Ni1000TK5000, NTC 5k, 10k, 20k, Precon, KTY81-210, NTC 1,8kOhm, LM235Z, DS18B20
- ▶ **Switching mode:** 2-wire connection (Standard) or optional: 3-wire connection or 4-wire connection
- ▶ **Connection:**
Andivi U-ANT-3V: screw clamps, max. 1,5 mm²
Andivi U-ANT-3M: Core-end sleeves
- ▶ **Power supply cord:** 2 m PVC (standard)
- ▶ **Casing:**
Andivi U-ANT-3V: stainless steel
Andivi U-ANT-3M: brass
- ▶ **Protection class:** IP54
- ▶ **Mounting equipment (included):** tension band

TYPE

Andivi ANDANTF3VA
(Contact Temp. Sensor - Stainless steel)

Andivi ANDANTF3MS
(Contact Temp. Sensor - Brass)

SKETCH

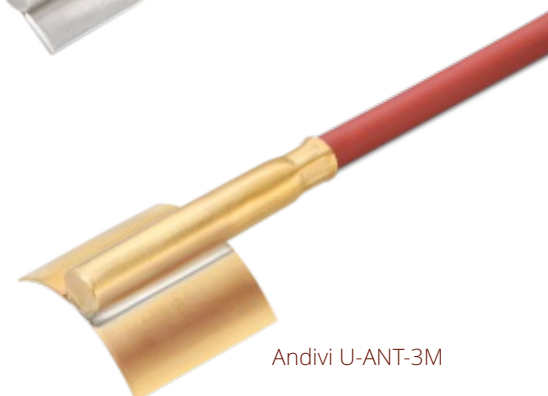


OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.



Andivi U-ANT-3V



Andivi U-ANT-3M

Temperature Sensors

Contact Safety Temperature Monitor

DESCRIPTION

The Contact Safety Temperature Monitor / Sensors are suited for temperature control and adjustment in pipes/drain pipes.

TECHNICAL DATA

- ▶ **Limiting temperature range:** 0°C ... +90°C
- ▶ **Tolerance:** ± 5 K
- ▶ **Differential:** 10 ± 3 K
- ▶ **Protection class:** IP40
- ▶ **Isolation class:** I
- ▶ **Temperature gradient:** < 1 K / min.
- ▶ **Max. head temperature:** +55°C
- ▶ **Max. sensor temperature:** +125°C
- ▶ **Storage temperature:** -15°C ... +60°C

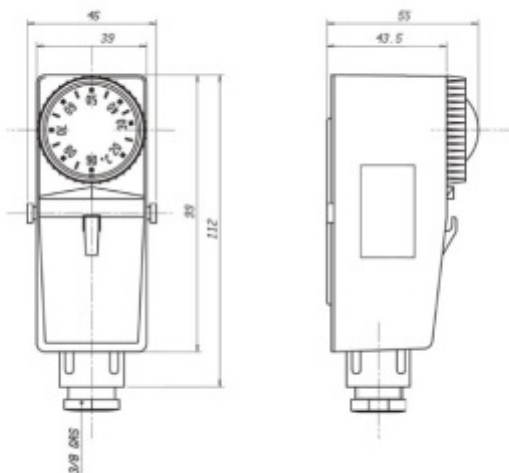
TYPE

Andivi ANDANTW1
(Contact Safety Temperature Monitor)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Temperature Sensors

Indoor Temperature Sensor With Setpoint Adjustment

DESCRIPTION

Our Indoor Temperature Sensors with optional control elements are designed for measuring the temperature in living and office spaces, reception halls, foyers etc. With the help of the respective sensors (see table), the device can be connected to all conventional control and display systems.

TECHNICAL DATA

- ▶ **Temperature sensor:** according to customer request
- ▶ **Power supply:** 24 VAC / VDC
- ▶ **Potentiometer:** 0-10 V, 1 kOhm, 5 kOhm, 10 kOhm
- ▶ **Pushbutton:** 10 mA, 35 VDC
- ▶ **LED:** 24 V/DC in green, yellow and red
- ▶ **5-step slide switch**
- ▶ **Casing:** ABS, white RAL 9010
- ▶ **Dimensions (L x W x H):** 87,5 x 87,5 x 30 mm
- ▶ **Measuring range (temp.):** 0°C ... +50 °C
- ▶ **Connection:** screw clamps, max. 1,5 mm²
- ▶ **Sensor switching mode:** 2-wire connection (standard)
- ▶ **Operating temp.:** -30°C ... +60 °C
- ▶ **Protection class:** IP20

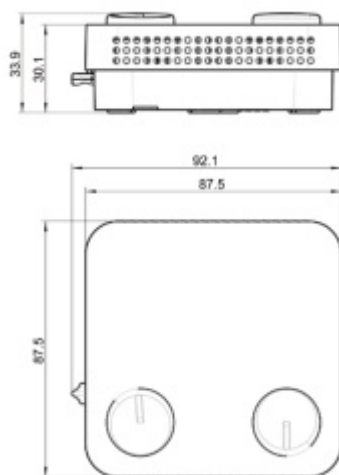
TYPE

Andivi ANDRTF3
(Indoor Temperature Sensor With Setpoint Adjustment / with Control Elements (Surface-Mounted))

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Temperature Sensors

Freeze-Protection Thermostat

DESCRIPTION

Our freeze-protection thermostat / switch is used for downstream temperature control of water-air heaters in ventilation and air-conditioning system in order to prevent frost damage. The thermostat features a remarkably small differential gap, high reproducibility and an automatic reset function.

TECHNICAL DATA

- ▶ **Switching capacity:** 250VAC, 10(6)A; signal voltage due to the gold-plated connectors
- ▶ **Adjustment range:** -10°C ... +15°C
- ▶ **Factory setting:** +5°C
- ▶ **Differential gap:** 2 ± 1 K
- ▶ **Reproducibility:** $\pm 0,5$ K
- ▶ **Length of capillary tube:** 600 m
- ▶ **Reset:** automatic
- ▶ **Mounting position:** variable
- ▶ **Electrical connection:** up to 2,5 mm² at microswitch
- ▶ **Cable inlet:** cable glands M16 x 1,5
- ▶ **Protection class:** IP65
- ▶ **Max. operating temperature:** +70°C
- ▶ **Min. operating temperature:** w + min. 2 °C
- ▶ **Storage temperature:** -30 °C ... +70 °C

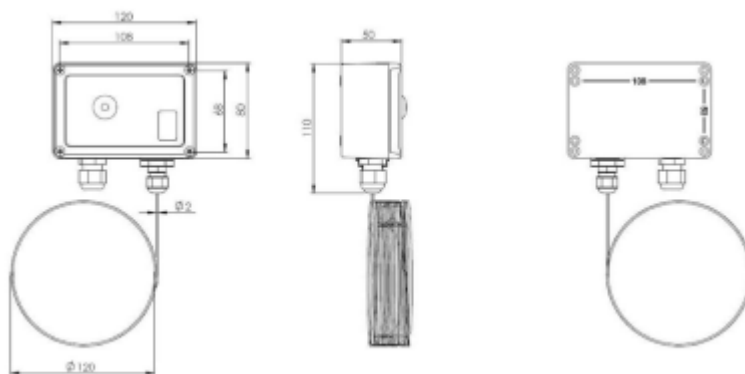
TYPE

Andivi ANDFST
(Freeze Protection Thermostat)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Pressure Sensors

Differential Pressure Transducer

DESCRIPTION

Digital differential pressure transducer for overpressure, underpressure and differential pressure measurements. Various measuring ranges can be selected with the help of a DIP switch. The integrated potentiometer can be used for offset calibration, a second potentiometer is used for selector shaft adjustment of the integrated relay. Optionally, the differential pressure switch is available with a graphic 1.44" e-Paper display.

TECHNICAL DATA

- ▶ **Power supply:** 15-36 V DC /24 AC
- ▶ **Measuring ranges:** selectable via DIP switch
 Ranges A
 0... 1/3/5/10 mbar,
 -1... +1/-3... +3/-5... +5/-10... +10 mbar
 Ranges B
 0...20/30/50/70mbar
 -20...+20/-30...+30/-50...+50/-70...+70mbar
- ▶ **Bursting pressure:**
 DD1: 0.6 bar
 DD2: 1.2 bar
- ▶ **Characteristic deviation:**
 DD1: $\pm 2,8\%$ at $+25^{\circ}\text{C}$
 DD2: $\pm 1,4\%$ v. EW at $+25^{\circ}\text{C}$
- ▶ **Medium:** clean, nonaggressive, non-condensing and nonflammable liquids
- ▶ **Output:** 0... 10 V or 4... 20 mA
- ▶ **Switching output:** Relay 24 V/Break contact potential-free
- ▶ **Relay switching load:** 1 A
- ▶ **Connection:** screw clamps, max. 1,5 mm²
- ▶ **Pressure type:** Differential pressure
- ▶ **Zero-point offset:** 10%
- ▶ **Operating temp.:** -10°C ... +70°C
- ▶ **Admissible ambient humidity:** 95% r.h. noncondensing
- ▶ **Casing:** 66 x 60 x 39 mm, polyamide in pure white IP65
- ▶ **Pressure connection:** stainless steel connection fitting
- ▶ **Contained accessories:** pressure connection set: 2x air connection fittings and PVC hose

TYPE

Andivi ANDDDU1/2
 (Differential Pressure Transducer)

OPTIONAL

graphic e-Paper display 1.44"

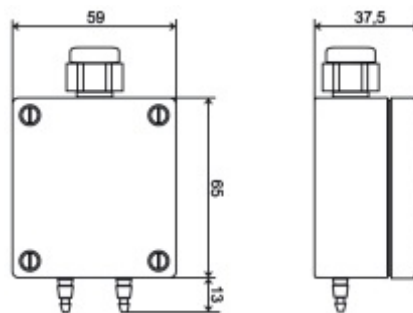
Visible surface: 29 x 22 mm

Resolution: 128 x 96 pixel

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Pressure Sensors

Differential Pressure Controller

DESCRIPTION

For monitoring incombustible and non-aggressive gaseous media. Our Differential Pressure Controllers are available with various measuring ranges and are delivered as standard with a connection set. Further features:

- ▶ adjustable with large scale,
- ▶ metric cable glands,
- ▶ duct connection nipples: length 60 mm,
- ▶ horizontal or vertical mounting position.

TECHNICAL DATA

- ▶ **Pressure ranges:** 20 ... 300 Pa, 30 ... 400 Pa, 50 ... 500 Pa, 200 ... 1000 Pa
- ▶ **Pressure medium:** air, incombustible and nonaggressive gases
- ▶ **Protection class:** IP54
- ▶ **Housing material:** switch casing made of polyamide PA 6.6, fastening parts POM
- ▶ **Life span:** 106 switching cycles
- ▶ **Diaphragm material:** silicon
- ▶ **Temperature range:** -20°C ... +85°C
- ▶ **Max. operating pressure:** 50 mbar
- ▶ **Pressure connection:** plastic with 6 mm diameter
- ▶ **Electrical rating:** 1,0 A, 250 VAC
- ▶ **Electrical connection:** blade terminal 6.3x0.8 mm pursuant to DIN 64244 with screw clamps up to 2.5 mm²
- ▶ **Accessories:** Mounting kit: 2 plastic duct connection nipples with mounting screws and 2 m PVC hose Ø 6 mm

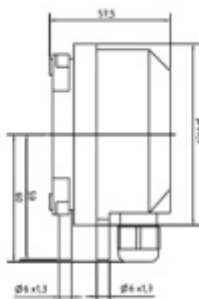
TYPE

Andivi ANDDDW
(Differential Pressure Controller)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Pressure Sensors

Pressure Transmitter

DESCRIPTION

Our pressure transmitter has a ceramic measuring cell for positive and negative pressure measurements. The transmitter of this series is for diverse measuring tasks in the areas of process engineering, process and environmental engineering and building technology. Transmitter is available with 0-10V and 4-20mA output signals.

TECHNICAL DATA

- ▶ **Sensor:** Relative
- ▶ **Output signals:**
0 ... 10 V or 4-20 mA or 0,5 V upon request
- ▶ **Measuring range:** 0...1,6 bar, 0...2,5 bar, 0...4,0 bar, 0...6,0 bar, 0...10,0 bar, 0...16,0 bar, 0...25,0 bar, 0...40,0 bar, 0...60,0 bar, -1...0 bar, -1...0,6 bar, -1...1,5 bar, -1...3,0 bar, -1...5,0 bar, -1...9,0 bar, -1...15,0 bar, -0...-1,0 bar
- ▶ **Bursting pressure:** <1% FS (fullscale)
- ▶ **Linearity:** <0,5% FS
- ▶ **Hysteresis:** 0,03% FS/K
- ▶ **Temperature sensor offset:** 0,05% FS/K
- ▶ **Temperature sensor measuring range:** 0 ... 85°C
- ▶ **Protection class:** IP65
- ▶ **Electrical connection:** standard valve connectors according to DIN EN 175301-803-A
- ▶ **Material (wetted parts):** chrome-nickel steel 1.4305, ceramics: Al₂O₃
- ▶ **Connection:** G1/2", G1/4", other options upon request
- ▶ **Housing material:** 1.4305; seal Viton

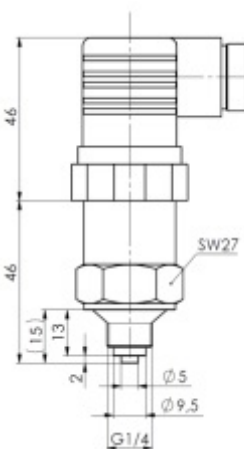
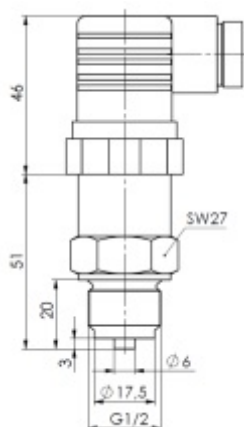
TYPE

Andivi ANDFME11
(Pressure Transmitter)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Humidity Sensors

Condensation Monitor

DESCRIPTION

Our condensation monitors are typically mounted to cooling and cold water pipes, cooling ceilings or other cooled surfaces. Both models offer reliable detection of condensation and protect the objects against the former. The external condensation monitor has an external measuring point and can easily be mounted in confined spaces. Our condensation monitors can be used as monitors on cooling ceilings and pipes and the additional internal switching output is capable of activating heatings or other actuators.

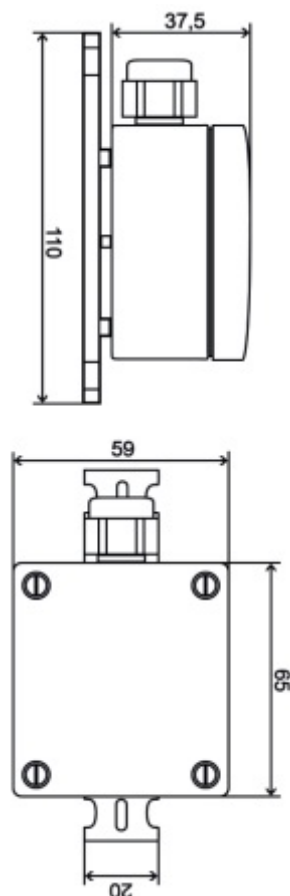
TECHNICAL DATA

- ▶ **Switching point:** adjustable between 80 and 100%
- ▶ **Switching Hysteresis:** ca 5% r.h.
- ▶ **Operating range:** 0 ... 100% r.h.
- ▶ **Operating temp.:** -30°C ... +70°C
- ▶ **Dew:** admissible
- ▶ **Condensate:** temporary admissible
- ▶ **Measuring medium:** ambient air without atmospheric pollution
- ▶ **Response time:** ca 120 sec. at switching point from 75% to condensation
- ▶ **Connection cable length (at external):** 2000 mm silicon
- ▶ **Operating voltage:** 16 ... 24 V DC or 24 V AC
- ▶ **Operating current (at 24 V DC):** max. 30 mA with energized relay
- ▶ **Relay:** 15 mA max. with deenergized relay
- ▶ **Functional control:**
green LED for when in operation
red LED when relay is energized
- ▶ **Switching characteristic:** isolated relay with switching contact, closed at normal operation (condensate-free). Open at missing operating voltage or forming of condensation.
- ▶ **Contact voltage:** max. 60 Vss
- ▶ **Switching current:** Max 1A AC / DC
- ▶ **Switching relay capacity:** 60 V / 1A

TYPE

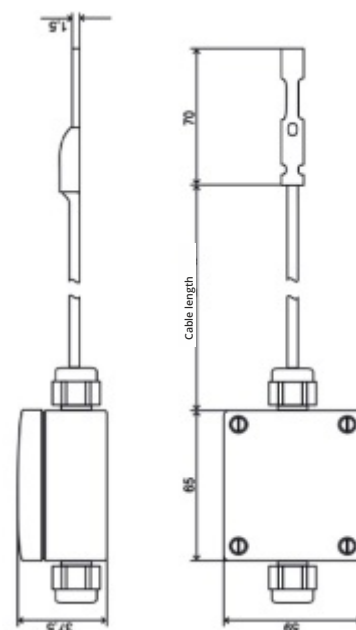
Andivi ANDTPW / ANDTPWEXT
(Condensation Switch)

SKETCH



OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.



Humidity Sensors

Duct Hygrostat

DESCRIPTION

The U-KH Hygrostat is a two-level controller for controlling the relative humidity in air ducts of air-conditioning system, conditioning cabinets. The device is also applied in food storages, cooling chambers for fruits and vegetables, greenhouses of gardening companies, textile industry, paper and printing industry, movie industry and hospitals – basically in all places where humidity monitoring and control is required.

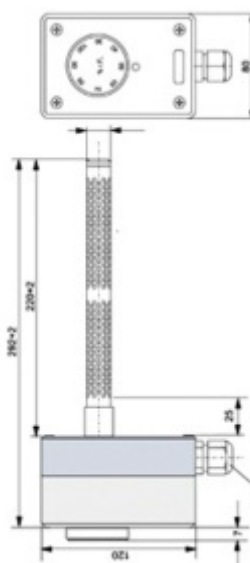
TECHNICAL DATA

- ▶ **Scale range:** 30 ... 100% r.h.
- ▶ **Accuracy:**
 $\pm 3.5\%$ r.h. in measuring range $> 50\%$ r. h.
 $\pm 4\%$ r.h. in measuring range $< 50\%$ r.h.
- ▶ **Operating range:** 35 ... 95% r.h.
- ▶ **Measuring medium:** air
(nonaggressive), depressurized
- ▶ **Differential gap:** ca 4% r.h. for 50% r. h.
- ▶ **Max. voltage:** 250 V AC
- ▶ **Switching capacity of changeover:**
 ohmic load ($\cos \phi=1$) 15A AC 230 V
 inductive load ($\cos \phi=0,7$) 2A AC 230 V
 Voltage 0,25A DC 230 V
- ▶ **Switching capacity, minimum load:**
 100 mA, 125 VAC
- ▶ **Weight:** 700 g
- ▶ **Protection class U-KH internal :** IP54
- ▶ **Protection class U-KH external:** IP65
- ▶ **Adm. air velocity:** 8 m/sec
- ▶ **Operating temperature:** 0°C ... +60°C
- ▶ **Storage temperature:** -30°C ... +60°C

TYPE

Andivi ANDKHY
 (Duct Hygrostat with internal and external controls)

SKETCH



OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.



Humidity Sensors

Room Hygrostat

DESCRIPTION

The room hygrostat is a two-position controller for control of relative humidity of air. It can be used to control the humidification and dehumidification in Office spaces and Computer rooms. Further fields of application are: food and beverages storages, cold storage rooms for fruit and vegetables, greenhouses for gardening use, the textile industry, paper and printing industry, movie industry and hospitals.

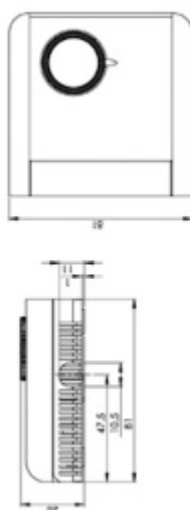
TECHNICAL DATA

- ▶ **Scale range:** 30 ... 100% r.h.
- ▶ **Accuracy:**
 $\pm 3.0\%$ r.h. in measuring range $> 40\%$ r. h. $\pm 4\%$ r.h. in measuring range $< 40\%$ r.h.
- ▶ **Operating range:** 35 ... 95% r.h.
- ▶ **Measuring medium:** air (nonaggressive), depressurized
- ▶ **Switching differentiation:** based on 50% r. h. about 4% r. h.
- ▶ **Switching capacity:** max 250 V AC and ... 5 A with resistive load for dehumidification ... 2 A with resistive load for humidification ... 1 A at inductive load with power factor = 0.7
- ▶ **Life span:** 100,000 switching cycles
- ▶ **Weight:** 58 g
- ▶ **Protection class:** IP30D
- ▶ **Operating temperature:** 0°C ... +60°C
- ▶ **Storage temperature:** -40°C ... +60°C

TYPE

Andivi ANDRHY
(Room Hygrostat with inner and outer controls)

SKETCH



OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.



Humidity Sensors

Indoor Humidity / Temperature Sensor

DESCRIPTION

Apparatus for measuring the relative humidity and/or temperature in living and office spaces, reception halls, foyers etc. The measuring transducer records the temperature and humidity via an internal sensor and converts the value into a standardized analogue output signal in the range between 0-10V/4-20 mA.

TECHNICAL DATA

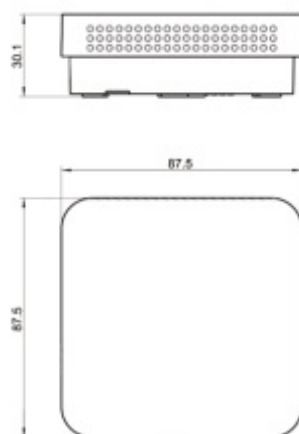
- ▶ **Power supply 0...10 V:** 16 ... 36 VDC, 24 VAC
- ▶ **Power supply with 4 ... 20 mA:** 16 ... 36 VDC
- ▶ **Humidity sensor type:** capacitive
- ▶ **Temperature sensor type:** capacitive
- ▶ **Humidity measuring range:** 0 ... 100% r.h.
- ▶ **Output humidity:** 0 ... 10 V
- ▶ **Tolerance humidity at 35% ... 70%:** $\pm 2\%$ (25 ... 90% r.h.)
- ▶ **Temp. measurement range:** -30°C ... +50°C
- ▶ **Output temperature for active design:** passive
- ▶ **Tolerance Temperature:** ± 0.5 K
- ▶ **Analog output load:** min. load resistance 10 kOhm at 0-10 V
- ▶ **Analog output load:** 4 ... 20 mA: 300 ... 1000 Ohm
- ▶ **Operating temp.:** -30°C ... +50 °C
- ▶ **Operating range:** 0 ... 98% r. h.
- ▶ **Response:** 8 sec. (63% dew)
- ▶ **Connection:** screw terminals 1.5 mm²

- ▶ **Housing:** Material ABS, color RAL 9010
- ▶ **Housing dimensions (L x W x H):** 87.5 x 87.5 x 30 mm
- ▶ **Protection class:** IP20

TYPE

Andivi ANDRFFT
(Indoor Humidity/Temperature Sensor)

SKETCH



OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.



Humidity Sensors

Outdoor Humidity / Temperature Sensor

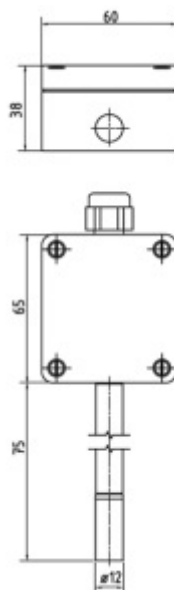
DESCRIPTION

Device for measuring the relative humidity/temperature in outdoor areas or indoor areas subject to high requirements. The measuring transducer records the temperature and humidity via an internal sensor and converts the value into a standardized analogue output signal in the range between 0-10V/4-20 mA. Additionally, a passive temperature sensor can be connected. The sensor features long-term stability and no recalibration is required.

TECHNICAL DATA

- ▶ **Power supply 0...10 V:** 16 ... 36 V DC, 24 VAC
- ▶ **Power supply with 4 ... 20 mA:** 16 ... 36 VDC
- ▶ **Sensor element (humidity):** capacitive
- ▶ **Sensor element (temp.):** capacitive
- ▶ **Sensor element with passive temp. output:** optional
- ▶ **Humidity measuring range:** 0 ... 100% r.h.
- ▶ **Output Humidity:** 0 ... 10 V or 4...20 mA
- ▶ **Humidity tolerance at 35...70% r.h.:** $\pm 2\%$ (25 ... 90% r.h.)
- ▶ **Operating temperature:** -30°C ... +70°C
- ▶ **Output temperature for active versions:** 0 ... 10 V or 4...20mA
- ▶ **Temperature tolerance :** ± 0.5 K
- ▶ **Load for analog 0-10 V output:** 10...100 kOhm
- ▶ **Apparent ohmic resistance for analog output:** 300...1000 Ohm
- ▶ **Operating temp.:** -30°C ... +70 °C
- ▶ **Operating range:** 0 ... 98% r. h.
- ▶ **Response time for r.h:** 8 sec. (63% at condensation)
- ▶ **Sleeve (B x L):** 12 x 75 mm, VA
- ▶ **Connection:** Screw clamps 1.5 mm²
- ▶ **Casing:** Material PA6 15% GK, RAL 9010
- ▶ **Housing dimensions (L x W x H):** 65 x 60 x 38 mm
- ▶ **Protection class:** IP65
- ▶ **Sensor protection:** sintered filter made of high density polyethylene

SKETCH



TYPE

Andivi ANDARFT
(Outdoor Humidity/Temperature Sensor)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.



Humidity Sensors

Duct Humidity / Temperature Sensor

DESCRIPTION

Device for measuring the relative humidity/temperature in ducts or indoor areas subject to high requirements. The measuring transducer records the temperature and humidity via an internal sensor and converts the value into a standardized analogue output signal in the range between 0-10V/4-20 mA.

TECHNICAL DATA

- ▶ **Power supply 0-10 V:** 16 ... 36 V DC, 12-24 V AC
- ▶ **Power supply with 4 ... 20 mA:** 16 ... 36 V DC
- ▶ **Sensor element (humidity):** capacitive
- ▶ **Sensor element (temp.):** capacitive
- ▶ **Sensor element with passive temperature output:** optional
- ▶ **Humidity measuring range:** 0 ... 100% r.h.
- ▶ **Output Humidity:** 0 ... 10 V or 4...20 mA
- ▶ **Humidity tolerance at 35...70% r.h.:** $\pm 2\%$ (25 ... 90% r.h.)
- ▶ **Operating temp.:** -30°C ... +70°C
- ▶ **Output temperature for active versions:** 0 ... 10 V or 4...20 mA
- ▶ **Temperature tolerance :** ± 0.5 K
- ▶ **Load for analogue 0-10 V output:** 10...100 kOhm
- ▶ **Apparent ohmic resistance for analogue output:** 300...1000 Ohm
- ▶ **Operating temp.:** -30°C ... +70 °C
- ▶ **Operating range:** 0 ... 98% r. h.
- ▶ **Response time for r.h:** 8 sec. (63% at condensation)

- ▶ **Sleeve (B x L):** 12 x 75 mm, VA
- ▶ **Connection:** Screw clamps 1.5 mm²
- ▶ **Casing:** Material PA6 15% GK, RAL 9010
- ▶ **Housing dimensions (L x W x H):** 65 x 60 x 38 mm
- ▶ **Protection class:** IP65
- ▶ **Sensor protection:** sintered filter made of high density polyethylene

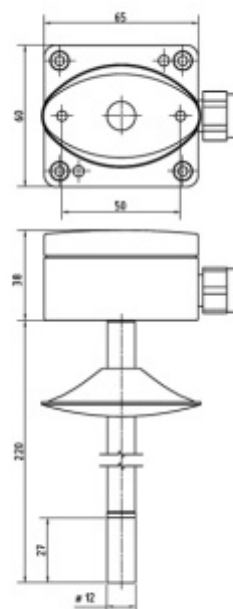
TYPE

Andivi U-KFFT
(Duct Humidity / Temperature Sensor)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Humidity Sensors

Rain Sensor / Rain Detector

DESCRIPTION

Device for detecting precipitation as either rain or snow. The circuit polarity and sensitivity are adjustable. A connectible heating prevents the formation of ice or dew and helps the device to dry faster.

TECHNICAL SPEC.

- ▶ **Operating voltage:**
24 V DC / V AC + 10%
- ▶ **Power consumption:**
50 mA, 40 ... 180 mA heater (PTC)
- ▶ **Measuring principle:** Electrolytic AC measuring
- ▶ **Contacts load:** max. 30 VDC / 4A
- ▶ **Terminal connection:** 0.5 mm - 1.5 mm², clamp with wire protection
- ▶ **Dimensions (L x W x H):**
80 × 82 × 58 mm
- ▶ **Cable entry:** M16
- ▶ **Protection class:** IP54

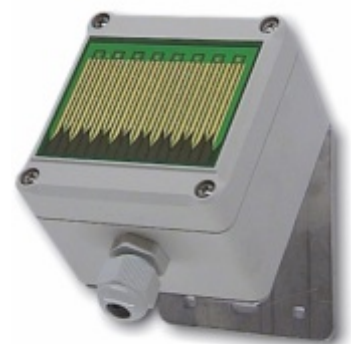
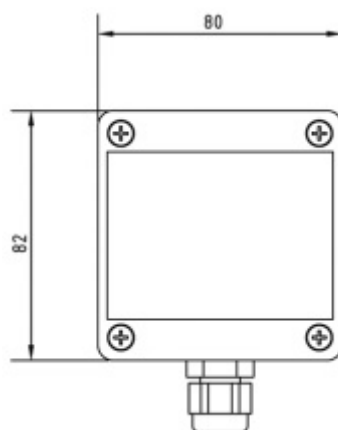
TYPE

Andivi ANDRGM1
(Rain Sensor / Rain Detector)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Motion and Brightness Sensors

Indoor Motion and Brightness Sensor

DESCRIPTION

The combination sensor for motion and light can be used both indoors and outdoors. The light sensor is equipped with a DIP switch for 4 different light levels. The motion sensor's time constant of the relay output can be set between 1 second and 10 minutes.

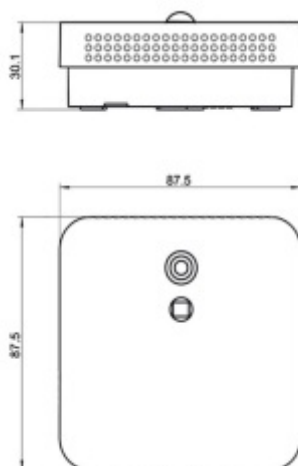
TECHNICAL DATA

- ▶ **Power supply:** 16 ... 36 V DC, 24 V DC
- ▶ **Analog output U:** min. load resistance 10 kOhm
- ▶ **Analog output I:** load: 300 ... 1000 Ohm
- ▶ **Power input:** relay PIR 60 V DC / 1 A
- ▶ **Casing:** material ABS, color RAL 9010
- ▶ **Accuracy LUX:** $\pm 10\%$
- ▶ **Measuring range LUX:** 4 measurement ranges selectable:
0...1000
0...10000
0...50000
0...100000
- ▶ **Operating temp.:** -30°C ... +70 °C
- ▶ **Operating humidity MUF:** 0 ... 98%, noncondensing
- ▶ **Connection:** screw clamps, max. 1,5 mm²
- ▶ **Protection class:** IP54
- ▶ **Output:** 0 ... 10 V or relay
- ▶ **Norms:** CE, EMC pursuant to EN 61326-1 2006, EMC directive 89/336/EEC

TYPE

Andivi ANDIPIRLUX
(Indoor Motion and Brightness Sensor)

SKETCH



OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.



Motion and Brightness Sensors

Outdoor Motion and Brightness Sensor

DESCRIPTION

The combination sensor for motion and light can be used both indoors and outdoors. The light sensor is equipped with a DIP switch for 4 different light levels. The motion sensor's time constant of the relay output can be set between 1 second and 10 minutes.

TECHNICAL DATA

- ▶ **Power supply:** 16 ... 36 V DC, 24 V DC
- ▶ **Analog output U:** min. load resistance 10 kOhm
- ▶ **Analog output I:** load: 300 ... 1000 Ohm
- ▶ **Power input:** relay PIR 60 V DC / 1A
- ▶ **Accuracy LUX:** $\pm 10\%$
- ▶ **Measuring range LUX:** 4 measurement ranges selectable:
0...1000
0...10000
0...50000
0...100000
- ▶ **Operating temp.:** -30°C ... +70 °C
- ▶ **Operating humidity MUF:** 0 ... 98%, noncondensing
- ▶ **Connection:** screw clamps, max. 1,5 mm²
- ▶ **Protection class:** IP54
- ▶ **Norms:** CE, EMC pursuant to EN 61326-1 2006, EMC directive 89/336/EEC

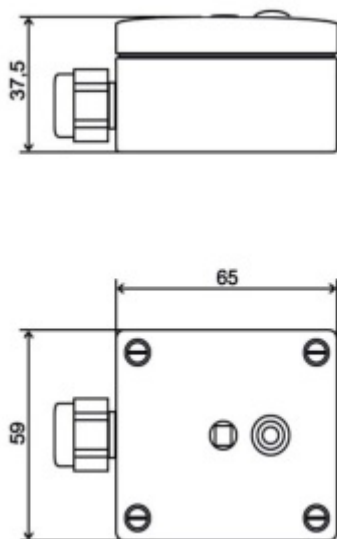
TYPE

Andivi ANDAPIRLUX
(Outdoor Motion and Brightness Sensor)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Air Quality and CO₂ Sensors

Indoor Air Quality Sensor

DESCRIPTION

For measuring the air quality in living and office spaces etc, optionally with 0-10 V or 4-20 mA output. The Indoor Air Quality Sensor is a VOC/mixed gas sensor. The CO₂ equivalents are derived from a conforming algorithm as the odor emissions are overlaying the CO₂ value (see graphics). Long-term drifting and operational deterioration can be eliminated by regularly running the automatic calibration.

TECHNICAL SPEC.

- ▶ **Power supply:**
at 0 ... 10V: 16 ... 36 V DC or 24 V AC
at 4 ... 20 mA: 16 ... 24 V DC
- ▶ **Measuring range:** 0-2000 ppm
- ▶ **Current consumption:**
max. 45 mA
- ▶ **Output:** 0 ... 10 V or 4 ... 20 mA
- ▶ **Calibration (equivalent):** good air:
1 V ... 4 mA = 250 ppm CO₂ equivalent
5 V ... 12 mA = 1175 ppm CO₂ equivalent
10 V ... 20 mA = 2000 ppm CO₂ equivalent
- ▶ **Operating Temperature:** 0°C ... +40°C
- ▶ **Humidity:** 5 ... 95% RH
- ▶ **Protection class:** IP20
- ▶ **Casing:** Material ABS, color RAL 9010

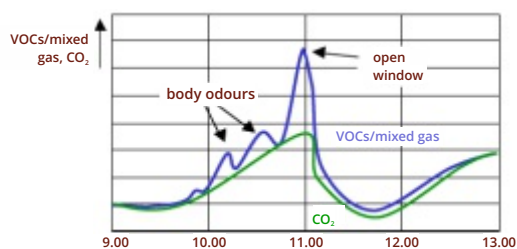
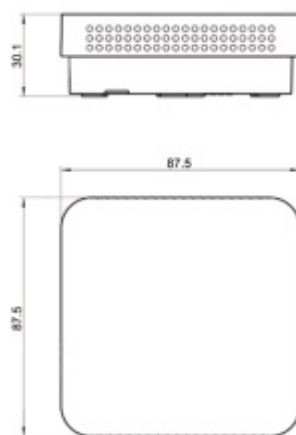
TYPE

Andivi ANDRALQ-U
(Indoor Air Quality Sensor)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Air Quality and CO₂ Sensors

Duct Air Quality Sensor

DESCRIPTION

For measuring the air quality in ducts of air-conditioning systems, optionally with 0-10 V or 4-20 mA output. The Duct Air Quality Sensor is a VOC/mixed gas sensor. The CO₂ equivalents are derived from a conforming algorithm as the odour emissions are overlaying the CO₂ value (see graphics). Long-term drifting and operational deterioration can be eliminated by regularly running the automatic calibration.

TECHNICAL SPEC.

- ▶ **Power supply:**
at 0 ... 10V: 16 ... 36 V DC or 24 V AC
at 4 ... 20 mA: 15 ... 36 V DC
- ▶ **Power consumption:** max. 45 mA
- ▶ **Output:** 0 ... 10 V or 4 ... 20 mA
- ▶ **Measuring range:** 0-2000 ppm
- ▶ **Calibration (equivalent):** good air:
1 V ... 4 mA = 250 ppm CO₂ equivalent
5 V ... 12 mA = 1175 ppm CO₂ equivalent
10 V ... 20 mA = 2000 ppm CO₂ equivalent
- ▶ **Operating Temperature:** 0°C ... +50°C
- ▶ **Humidity:** 5 ... 95% RH
- ▶ **Protection class:** IP65 (housing)
- ▶ **Casing:** ABS
- ▶ **Mounting equipment (included):**
Mounting flange

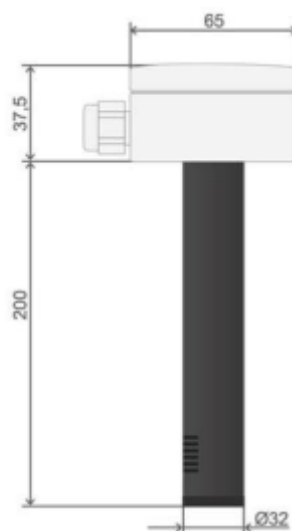
TYPE

Andivi ANDKALQ
(Duct Air Quality Sensor)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Air Quality and CO₂ Sensors

Indoor CO₂ / Temperature Sensor

DESCRIPTION

The Indoor sensor for CO₂ and temperature records the ambient air's CO₂ concentration in living and office spaces. The sensor converts the values measured in the ranges of optionally 0-2000ppm or 0-5000 ppm into a linear 0-10 V output signal. The CO₂ value is measured via the NDIR sensor, which is able to compensate possible pollution with the help of its 2-ray measuring principle. Optionally, the sensor is available with an additional sensor for measuring temperature and humidity.

TECHNICAL SPEC.

- ▶ **Power supply:**
at 0 ... 10V: 16 ... 24 V DC or 24 V AC
at 4 ... 20 mA: 16 ... 24 V DC
- ▶ **Power consumption:** 9 mA
- ▶ **Electrical connection:** Screw clamps
- ▶ **Output:** 0...10 V or 4-20mA
- ▶ **Sensorelement:** NDIR - Sensor with Autocalibration through Dual - Beam
- ▶ **Measuring range CO₂:** 0...2000 ppm
- ▶ **Accuracy:** < ± (50ppm +2% of scale reading) at 25°C and 1013 mbar
- ▶ **Temperature:** 0...10 V or 4-20mA / 0°C...+50°C
- ▶ **Accuracy:** ±0,5°C
- ▶ **Humidity:** 0...10 V or 4-20mA / 0...100% r.h.
- ▶ **Accuracy:** < ± 3% at 25°C between 10...90% r.h.
- ▶ **Operating temperature:** 0°C...+50°C
- ▶ **Humidity:** 10...95% r.h.
- ▶ **Protection class:** IP20
- ▶ **Casing:** Material ABS
- ▶ **Colour:** RAL9010

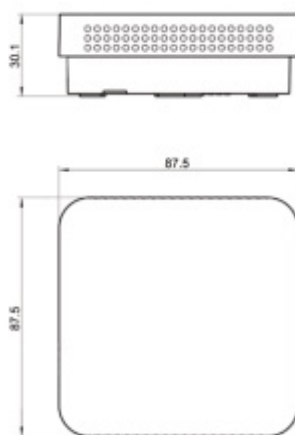
TYPE

Andivi ANDRACO2
(Indoor CO₂ / Temperature Sensor)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Air Quality and CO₂ Sensors

Duct CO₂ / Temperature Sensor

DESCRIPTION

Our sensor reliably detects CO₂ concentration within ventilation ducts room installations within a range of 0-2000 ppm, or alternatively of 0-5000 ppm, sensor converts measured values into a linear output signal 0-10 V. The measurement of the CO₂-value is performed by a NDIR sensor, which works infrared-based and compensates possible pollution through its 2-ray measuring principle. Optionally our sensor is also available for measuring temperature and humidity.

TECHNICAL SPEC.

- ▶ **Power supply:**
at 0 ... 10V: 15 ... 36 V DC or 24 V AC
at 4 ... 20 mA: 15 ... 36 V DC
- ▶ **Power consumption:** 9 mA
- ▶ **Electrical connection:** Screw clamps
- ▶ **Output:** 0...10 V or 4-20 mA
- ▶ **Sensor element:** NDIR - Sensor with Autocalibration through Dual - Beam
- ▶ **Measuring range CO₂:** 0...2000 ppm
- ▶ **Accuracy:** < ± (50ppm +2% of scale reading) at 25°C and 1013 mbar
- ▶ **Temperature:** 0...10 V or 4-20 mA / -30°C...+70°C
- ▶ **Accuracy:** ±0,5°C
- ▶ **Humidity:** 0...10 V or 4-20mA / 0...100% r.h.
- ▶ **Accuracy:** < ± 3% at 25°C between 10...90% r.h.
- ▶ **Operating temperature:** -20°C...+50°C
- ▶ **Humidity:** 10...95% r.h.
- ▶ **Protection class:** IP65 (casing)
- ▶ **Casing:** Plastic
- ▶ **Mounting equipment (included):**
Mounting flange

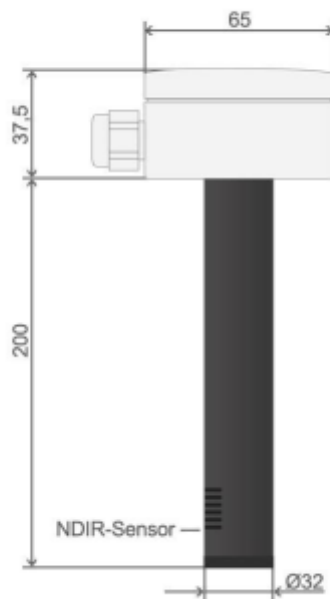
TYPE

Andivi ANDKACO2
(Duct CO₂ / Temperature Sensor)

OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

SKETCH



Flow Sensors

Flow Switch for Liquid Media

DESCRIPTION

Device for controlling the flow of liquid media in pipes with a diameter of 1/2" to 8". Used as water shortage protection in HVAC systems. The monitor is equipped with a potential free changeover switch, responsible for reliably activating an actuator.

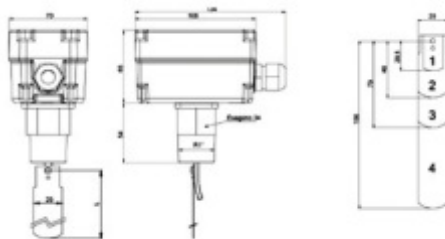
TECHNICAL SPEC.

- ▶ **Contacts:** Microswitch as single-pole potential-free changeover switch
- ▶ **Switching capacity:** 16 (8) A, 24-250 V AC, at 24 V AC min. 150mA
- ▶ **Life Span:** 100,000 cycles at nominal capacity
- ▶ **Electrical connection:** screw terminal to 1.5 mm², cable Ø 6 ... 9 mm
- ▶ **Max. pressure:** 15 bar or 30bar
- ▶ **Casing** ABS, white
- ▶ **Cable gland:** PG 20 x 1.5 mm
- ▶ **Terminal thread:** 1 "GAS, brass or stainless steel VA
- ▶ **Paddle material:** V2A
- ▶ **Weight:** 600 g
- ▶ **Protection class:** IP65
- ▶ **Protection:** III
- ▶ **Medium temp.:** -25°C ... +120 °C
- ▶ **Ambient humidity:** 10 ... 95% RH, without condensation
- ▶ **Ambient temp.:** -40°C ... +85°C
- ▶ **Storage temp.:** -20°C ... +60°C
- ▶ **Standards:** CE, RoHS

TYPE

Andivi ANDSW1/2
(Flow Switch for Liquid Media)

SKETCH



OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.



Flow Sensors

Air Flow Switch / Stream Monitor

DESCRIPTION

Air flow controller based on a microcontroller for measuring nonaggressive gaseous flows in the range of 0.5 to 10/30 m/s. Available with both 0-10 V and 4-20 mA output. Additionally, a separate output signal for temperature pickup can be added.

TECHNICAL SPEC.

- ▶ **Operating voltage:** 24 V DC
- ▶ **Voltage tolerance:** $\pm 5\%$
- ▶ **Signal display for voltage:** power available, green LED
- ▶ **Max. power consumption:** 4 VA
- ▶ **Admissible ambient temperature:** $-20^{\circ}\text{C} \dots +50^{\circ}\text{C}$
- ▶ **Flow output:** 0 ... 10 V ($R_a = 10$ kilohms), linear
- ▶ **Flow output:** 4 ... 20 mA ($R_a = 0.2$ kilohms), linear
- ▶ **Output signal accuracy:** $\pm 5\%$ FS
- ▶ **Relay output:**
Switching voltage 200 V AC / V DC 1 A
Energized and de-energized contact (depending on flow)
- ▶ **Function at flow:** switchpoint adjustable via potentiometer
- ▶ **Transistor output:** Open Collector / non-conductive when flow is present
- ▶ **Media temp. range:** $-25^{\circ}\text{C} \dots +80^{\circ}\text{C}$
- ▶ **Temperature gradient:** 30 K/min
- ▶ **Switching point:** Adjustable via potentiometer
- ▶ **Measuring range standard:** 0.1 ... 10 m/s
- ▶ **Max. measuring range:** 0.1 ... 30 m/s
- ▶ **Fitting length:** ca. 130 mm
- ▶ **Protection class (casing):** IP65

- ▶ **Protection class (sensor):** IP54
- ▶ **Pollution class:** II
- ▶ **Housing Dimensions:** 56 mm \times 86 mm \times 82 mm (L \times B \times H)

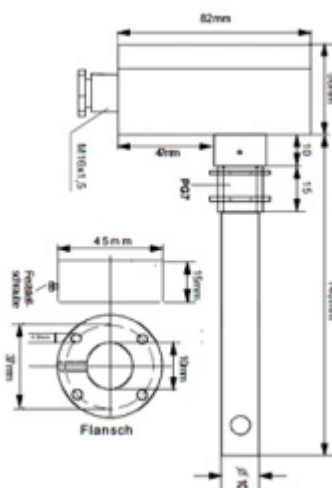
OTHER

- ▶ **Made in:** Germany, EU.
- ▶ **Warranty:** 2 years.
- ▶ **Certification:** CE certified.

TYPE

Andivi ANDSTF1
(Air Flow Switch / Air Flow Stream Monitor)

SKETCH



Temperature / Humidity / Air Quality / Motion + Light / Pressure / Flow

All Sensors^(1/2)

TEMPERATURE SENSORS

- ▶ Mean Value Temperature Sensor
- ▶ Duct/immersion Temperature Sensor (fast Response Time)
- ▶ Duct/immersion Temperature Sensor
- ▶ Cable/surface Temperature Sensor
- ▶ Indoor Pendulum Temperature Sensor
- ▶ Indoor Temperature Sensor (surface-mounted)
- ▶ Indoor Temperature Sensor With Control Elements (surface-mounted)
- ▶ Indoor Temperature Sensor With/without Control Element (flush-mounted)
- ▶ Immersion Temperature Sensor With Flexible Silicone Connection
- ▶ High Temperature Sensor
- ▶ Contact Temperature Sensors
- ▶ Outdoor Temperature Sensor
- ▶ Outdoor Temperature Sensor With Sun Protection
- ▶ Surface Temperature Sensor
- ▶ Radiation Sensor
- ▶ Radiation Sensor For Indoor Areas
- ▶ Radiation Sensor For Outdoor Areas
- ▶ Screw-in Sensor
- ▶ Screw-in/immersion Temperature Sensor
- ▶ Screw-in Sensor (with Neck Tube)
- ▶ Ceiling-mounted Temperature Sensor
- ▶ Sheath Thermocouple



- ▶ Sensor
- ▶ Screw-in Sensor (with Neck Tube)
- ▶ Ceiling-mounted Temperature Sensor



HUMIDITY SENSORS

- ▶ Ceiling-mounted Temperature Sensor
- ▶ Indoor Combination Sensor For Relative Humidity And Temperature
- ▶ Outdoor Combination Sensor For Relative Humidity/Temperature
- ▶ Duct Combination Sensor For Relative Humidity And Temperature
- ▶ Indoor Sensor For Absolute Humidity
- ▶ Outdoor Combination Sensor For Absolute Humidity/Temperature
- ▶ Duct Sensor For Absolute Humidity
- ▶ Dew Point Monitor
- ▶ High Temperature/Humidity Sensor
- ▶ Condensation Monitor
- ▶ Duct Hygrostat With Internal And External Controls
- ▶ Roomhygrostat for indoor and outdoor
- ▶ Rain Sensor



MOTION AND LIGHT SENSORS

- ▶ Motion And Light Sensor Outdoor
- ▶ Motion And Light Sensor Indoor



PRESSURE SENSORS

- ▶ Differential Pressure Controller
- ▶ Differential Pressure Transducer
- ▶ Differential Pressure Transmitter
- ▶ Pressure Transmitter



FLOW SENSORS

- ▶ Air Stream Monitor
- ▶ Flow Controller For Liquid Media



ACTIVE TEMPERATURE SENSORS

- ▶ Pt1000 Temperature Measuring Transducer With Housing
- ▶ Cable-type Temperature Sensor
- ▶ Mean Value Duct Temperature Sensor
- ▶ Duct/immersion Temperature Sensor (fast Response Time)
- ▶ Duct/immersion Temperature Sensor
- ▶ Cable/surface Temperature Sensor
- ▶ Indoor Pendulum Sensor
- ▶ Indoor Temperature Sensor (surface-mounted)
- ▶ Immersion Temperature Sensor With Flexible Silicone Connection
- ▶ High Temperature Sensor
- ▶ Contact Temperature Sensors
- ▶ Outdoor Temperature Sensor
- ▶ Outdoor Temperature Sensor With Sun Protection

AIR QUALITY SENSORS

- ▶ Indoor Air Quality Sensor
- ▶ Indoor Air Quality Sensor With Led Display
- ▶ Indoor Air Quality Sensor (flush Mounted)
- ▶ Duct Air Quality Sensor
- ▶ Indoor Sensor For Carbon Dioxide And Temperature
- ▶ Duct Sensor For Carbon Dioxide Measurements



THYRISTOR CONTROLLER

- ▶ Three-phase Thyristor Controller – 3-50a (TYCO)
- ▶ Single-phase Thyristor Controller – 15-50a (TYCO)
- ▶ Three-phase Thyristor Controller – 15-50a (TYCO)
- ▶ Three-phase Thyristors Controller – 3-25a (TYCO)
- ▶ Three-phase Thyristors Controller – 3-35a (TYCO)
- ▶ Single-phase Thyristor Controller – 2-12 A (STEINER)
- ▶ Single-phase Thyristor Controller – 60-160a (STEINER)
- ▶ Three-phase Thyristor Controller – 2-10a (STEINER)
- ▶ Three-phase Thyristor Controller – 60-160a (STEINER)

Temperature / Humidity / Air Quality / Motion + Light / Pressure / Flow

All Sensors_(2/2)

ADDITIONAL EQUIPMENT

- ▶ Freeze-protection Thermostat
- ▶ Contact Safety Temperature Limiter
- ▶ Contact Safety Temperature Monitor
- ▶ Contact Safety Temperature Thermostat With Exterior Controls
- ▶ Industrial Indoor Thermostat
- ▶ Indoor Thermostat
- ▶ Safety Temperature Limiter
- ▶ Double Thermostat
- ▶ Control Thermostat
- ▶ Bimetallic Contact Thermometer
- ▶ Bimetallic Flue Gas Thermometer
- ▶ Bimetallic Thermometer (Axial)
- ▶ Bimetallic Thermometer (Radial)
- ▶ Temperature Controller
- ▶ PID Controller
- ▶ Infrared Thermometer With Camera and Recorder

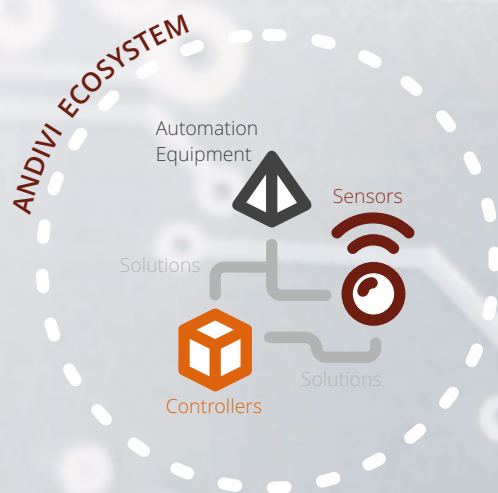


Hotel Room Solutions

Products	Controllers / Automation Stations	13
	I/O Units	17
	Thermostats	21
	Electronic Hotel Door Locks	29
	Intelligent Hotel Room Equipment	37
	Sensors	45
Solutions	▶ Hotel Room Solutions	77
	VIA Smart Home	85
	VIA Building & Energy Management	93

BUILDING
INTELLIGENCE
THE WAY YOUR
BUILDING
WANTS
IT.

andivi



Intelligent Hotel Room Solutions

360° Solution for Hotel Rooms

HOTELS ARE ABOUT AUTHENTIC EXPERIENCES. ARCHITECTURE, LOCATION, SERVICE, GASTRONOMY, SUSTAINABILITY, STORY ...

EVERYTHING MATTERS.

The 360° Solution for Hotels is an integral solution for hotel rooms that covers: Access control, Comfort Control and the appropriate Software to oversee the processes going on in hotel rooms.

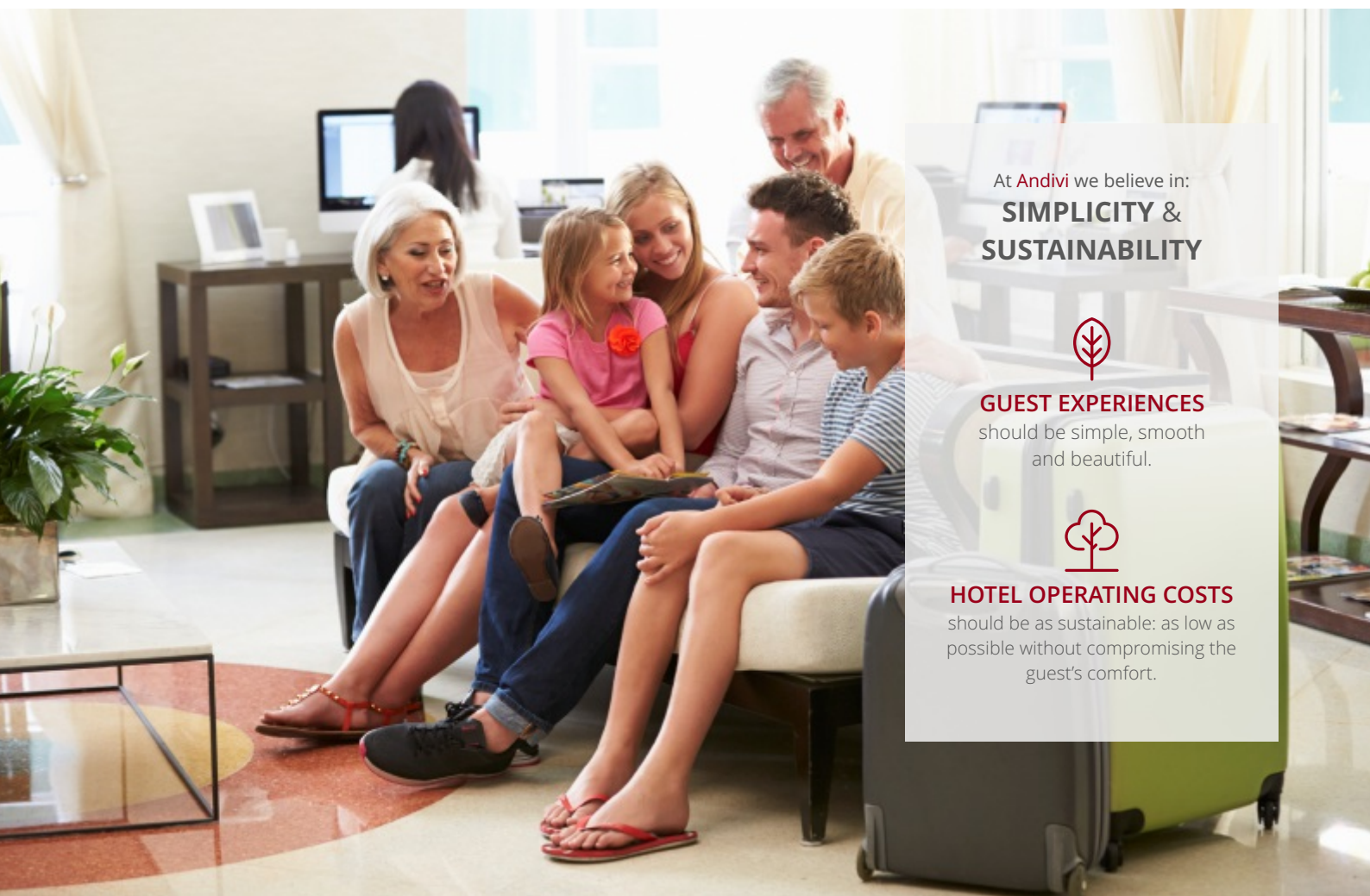
The Solution consists of: a Door Lock with card reader (or separate card reader and door lock), Energy Saving Switch, Thermostat, Control Unit, Hacco Webserver and Card Encoder.

WE CAN HELP YOU ACCOMPLISH 3 GOALS

1 Provide your hotel with a unified, all-in-one automation solution.

2 Help you save money by reducing and optimizing heating and cooling needs in every hotel room.

3 Customize your automation solution according to the needs of your project.



At Andivi we believe in:

SIMPLICITY & SUSTAINABILITY



GUEST EXPERIENCES

should be simple, smooth and beautiful.



HOTEL OPERATING COSTS

should be as sustainable: as low as possible without compromising the guest's comfort.

Intelligent Hotel Room Solutions

360° Solution for Hotel rooms

SOLUTION ELEMENTS



DOOR LOCK +
CARD READER
(optional: card
reader only)



ENERGY SAVING
SWITCH



CONTROL
UNIT



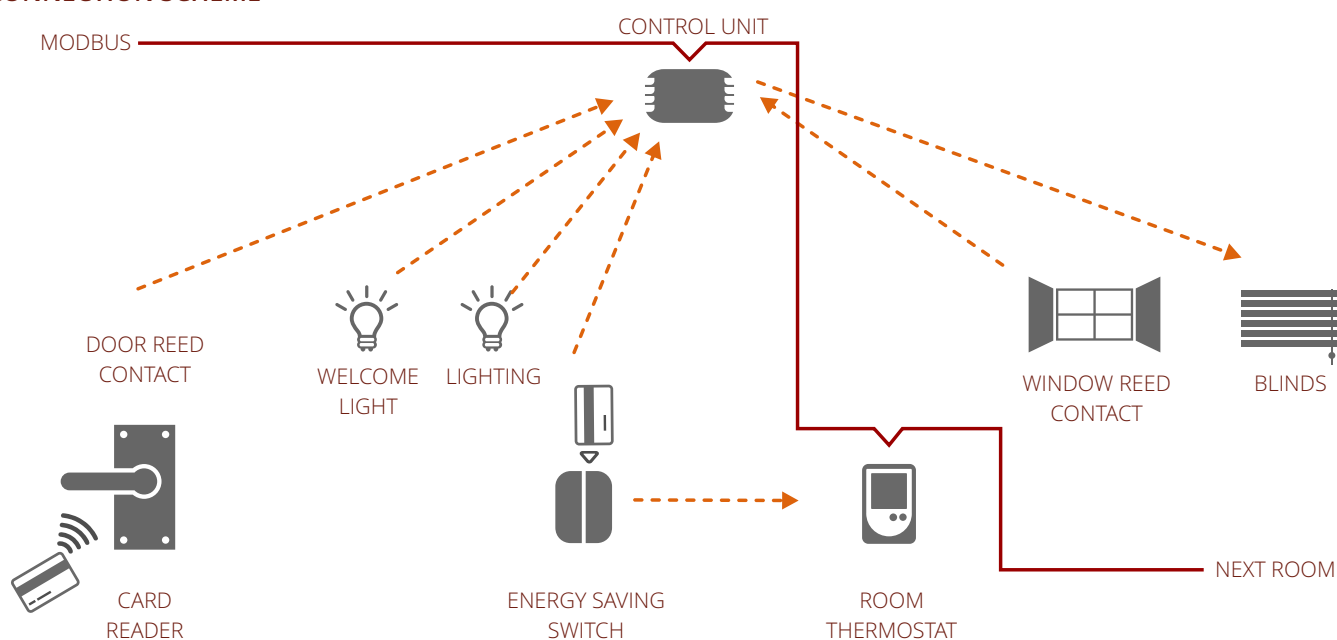
ROOM
THERMOSTAT



CARD
ENCODER
(reception)



CONNECTION SCHEME



Intelligent Hotel Room Solutions

Components of the 360° Hotel Solution

DOOR LOCK WITH CARD READER (optional: card reader only)

The Door Lock in the hotel room is equipped with an RFID card reader. This allows the guest to open the door with a contactless smart card or a proximity card.

The key benefits of the RFID smart card technology is security and reliability (MIFARE technology), rich POS integration (e.g. paying for other services in the hotel, access to different areas, etc.).

Once the guest opens the door, the welcome light will invite them to enter the room.

ENERGY SAVING SWITCH (KEY CARD SWITCH)

Upon arrival the guest card gets placed into the energy saving switch. This activates the power supply, sets the AC to comfort mode, enables the lights in the room and allows local blinds control.

After the card is removed from the energy saving switch for more than 1 minute, the controller disables power within the room, switches AC to Economy mode, turns off the lights and disables local window blinds control.

ROOM THERMOSTAT

Andivi TRC room thermostat is a multi-purpose programmable room thermostat used to control temperature and fan speed. With its unique intelligent thermodynamic algorithm it enables enhanced room comfort while using less energy.

It is intended for managing fan-coils and for regulating underfloor heating, ceiling cooling systems, radiator systems and other cooling/heating equipment.

Multi-purpose thermostat for manual/automatic control of fan-coils, underfloor heating systems, ceiling cooling systems, radiator system and

other cooling/heating equipment.

Detect guest presence in the room by directly connecting the Energy Saving Switch to the room thermostat – save energy while the guest is not in the room.

Monitor in-room guest presence status and control temperature in all the rooms straight from the reception. The Andivi TRC room thermostats have the ability to be connected to every guest room in the hotel from a single platform like [VIA](#) (page 79) or other 3rd party systems.

CONTROL UNIT

Andivi U-MIO3 control unit connects the energy saving switch and the TRC thermostat. Via Modbus protocol it transmits all the data from the room to the server. At the same time it operates all the lights on and turns off the power supply when the card is no longer in the energy saving switch.

CARD ENCODER

Andivi card encoder for coding contactless Mifare cards at the reception and defining access to specific areas of the property.

HOTEL SOFTWARE

The 360° Hotel Solution Software is simple, easy-to-use and features:

- ▶ programming electronic door locks or the external wall readers,
- ▶ encoding guest cards (together with the card encoder),
- ▶ making reservations/bookings,
- ▶ immediate cancelling of (lost/stolen) guest cards, saving logs etc.
- ▶ real-time room statuses,
- ▶ change temperature and AC in each room, etc.



Intelligent Hotel Room Solutions

Benefits of the 360° Solution for Hotels

ALL IN ONE SOLUTION



Get the entire Intelligent Hotel Room Solution through **one reliable provider**. No coordination, no wasting time with searching for compatible solutions. A tested solution you can rely on.

SAFETY



Be in the know while issues happen. At Andivi we **alarm you about all the things that could potentially go wrong**: flooding in the bathroom, AC not working, temperature deviation, burglary, etc.

COMPATIBILITY WITH OTHER HOTEL SOFTWARE



The 360° Hotel Room Solution is fully compatible with other hotel software (Micros Fidelio etc.). It also supports **MS SQL** and **MySQL** databases which can be integrated with the software of your choice.

DESIGN CONSISTENCY



The Andivi Hotel room Solution allows you to use any existing **program of push buttons that you prefer**. Use standard potential-free designer ranges of push buttons that have been specified by your architect or interior designer. Choose from all top providers: Gira, Jung, Busch-Jaeger, Vimar, Gewiss, AVE, Merlin, TEM and more.

ENERGY SAVINGS



At Andivi we care deeply about energy savings. This is why our aim is to equip you with a solution that will be **saving energy regardless of the guest's behavior**.

Andivi Hotel Room Solutions is **saving energy in the background - 24/7 every day in every hotel room**. We manage to make hundreds of small savings, which end up being a tremendous amount of energy (= money) by the end of the month. Every time the guest opens the window/door and leaves the room, an opportunity to save a little energy turns up.

COST EFFECTIVE SOLUTION



Andivi guarantees an **inexpensive solution that will surpass your expectations** and allow your guest a carefree experience.



Intelligent Hotel Room Solutions

Working Examples

→ ENTERING THE ROOM

Approach the door lock or the card reader with the guest card.

▶ The card reader unlocks the door lock.

▶ When the door opens, the Welcome lights turn on.

↩ LEAVING THE ROOM

After the guest card is removed from the energy saving switch for more than 1 minute, the control unit disables power within the room, switches AC to Economy mode, turns off the lights, disables local window blinds control.

▶ The control unit enables:

- Room power supply,
- AC to Comfort mode,
- Lights control,
- Local window blinds control.

▶ The guest card is put into the the energy saving switch which sends the data to the control unit.

⚡ SAVING ENERGY - WINDOWS, DOORS

▶ Window/Door contact sensor registers window/door opening and sends the status to the controller.

▶ If the Window is open, then room thermostat turns off AC.

🔔 ALARMS

The controller sets alarm if:

- ▶ the window is open and no card is in the energy saving switch,
- ▶ there is an AC failure (e.g. error, no power supply, etc.),
- ▶ the door has been opened for too long,
- ▶ SOS Alarm triggered by guest in the bathroom,
- ▶ there is a flooding in the bathroom,
- ▶ the deviation between desired and current temperature is too high,
- ▶ and more.



Intelligent Hotel Room Solutions

360° Solution for Hotel rooms

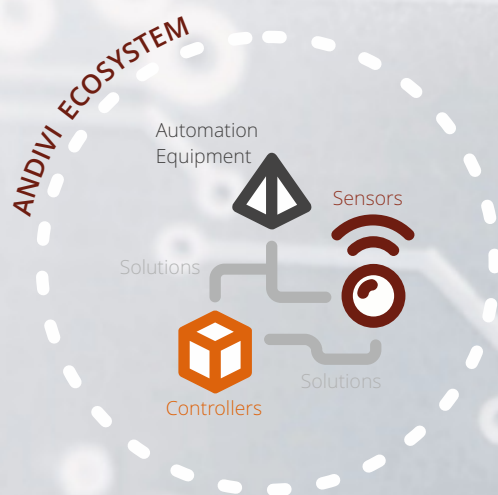


VIA Smart Home

Products	Controllers / Automation Stations	13
	I/O Units	17
	Thermostats	21
	Electronic Hotel Door Locks	29
	Intelligent Hotel Room Equipment	37
	Sensors	45
Solutions	Hotel Room Solutions	77
	▶ VIA Smart Home	85
	VIA Building & Energy Management	93

BUILDING
INTELLIGENCE
THE WAY YOUR
BUILDING
WANTS
IT.

andivi



VIA Smart Home Smart Home Solution

Home automation Andivi enables you to manage your home quick, simple and easy with **VIA** - a user friendly and intuitive smart home system that runs in a Web App on every PC, Mac or tablet device.

With **VIA** your home will not only be smart, but wise. Allow us to introduce, what VIA is able to do ...



HOME MANAGEMENT

With a "click" it is possible to manage:

- ▶ Temperature,
- ▶ Air conditioning,
- ▶ Inner lighting,
- ▶ Outer lighting,
- ▶ Christmas lighting,
- ▶ Blinds,
- ▶ Windows,
- ▶ Humidity,
- ▶ Lawn watering, parking defrosting,
- ▶ and much more.



TRY THE DEMO AT
www.andivi.com/via



VIA Smart Home

Smart Home Solution

SAFETY AND PEACE OF MIND

Home automation Andivi also comprises functions that contribute to additional safety of your home.

PRESENCE IMITATION SIMULATION

Random turning on and off of lights when nobody is home works like a preventive alarm system.

SAFETY SWITCH-OFF OF HOME APPLIANCES

Preventive turn-off of a stove, an oven or infra-heaters makes sure these

appliances are disconnected, and prevents a potential fire that could occur in case any of the appliances had mistakenly remained switched on.

SAFETY WATER SWITCH-OFF

Preventive turn-off of the washing machine, dishwasher and general disconnection of the water supply during the absence from home can prevent water leakage or possible flooding.



VIA Smart Home

Smart Home Solution

THE WISE HOME GENERATES SMART ENERGY SAVINGS

Home automation Andivi can help you save energy in a simple a way.

Integration and synchronisation of a weather station with blinds can result in your house's energy saving in all seasons.

WINTER SCENARIO

The house captures energy by automatically opening blinds, respectively directing the blind-lamellas in such a way, the house can capture as much heat energy from the sun as possible. This means a reduced need for heating.

SUMMER SCENARIO

The house automatically prevents additional warming with spontaneous closing of blinds, which means an immediate cooling need reduction.



Home automation Andivi.
A small contribution to your
big peace of mind.



VIA Smart Home

Smart Home Solution

ENERGY DATA IN THE PALM OF YOUR HAND (OPTIONAL)

VIA System can help you follow the parameters of all the energetics devices in your house in real-time.

VIA automatically alerts you about possible faults that can occur in the machine room (e.g. pressure drop in the heating system, too low forward flow temperature in the heating system, etc.).

This way, you will always be notified about possible faults on time, and be able to take action before they might grow into problems.



The house is a home
to all of your most
beautiful memories.

VIA Smart Home Smart Home Solution

SIMPLY

The VIA Smart Home Solution includes: VIA mServer, VIA Cloud hosting and the VIA WebApp.

VIA MSERVER

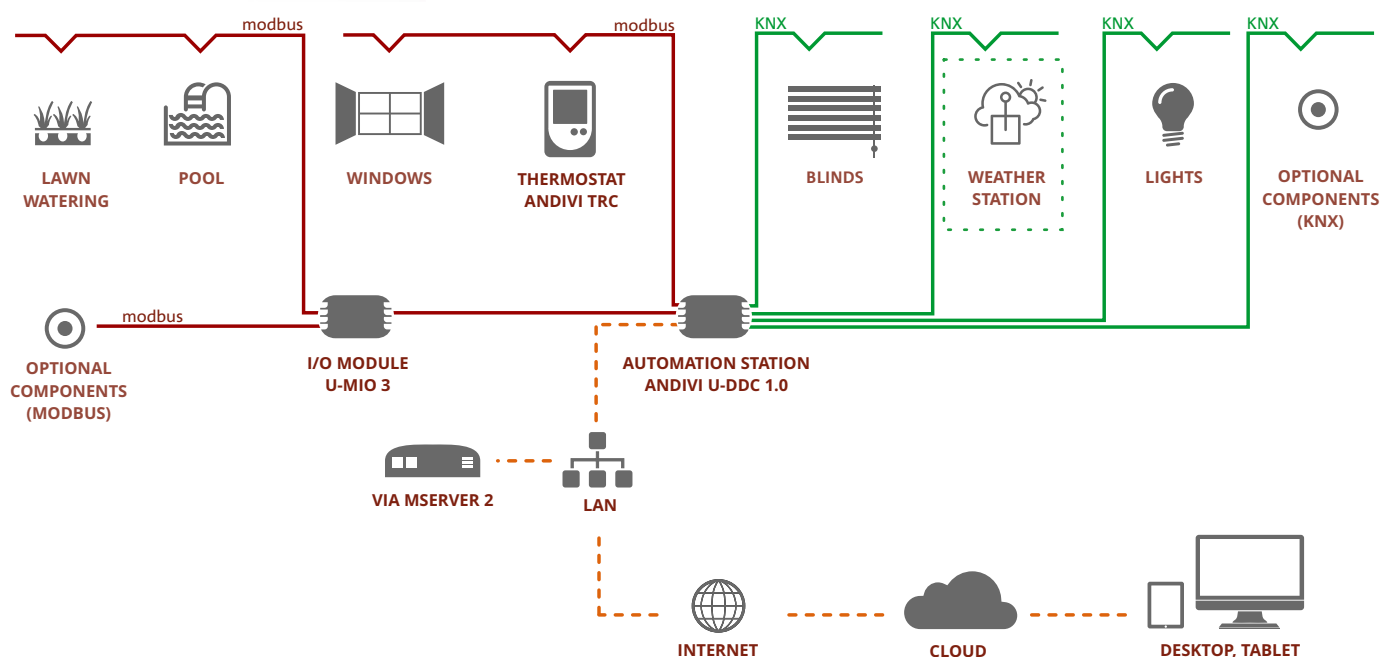
VIA mServer connects all controllers in the building, collects all the data and pushes it into the Cloud. So you can access VIA anytime, anywhere.



VIA mServer 2



CONNECTION SCHEME OF A CUSTOMIZED SMART VILLA



VIA Smart Home



TRY THE DEMO AT
www.andivi.com/via



VIA Smart Home System



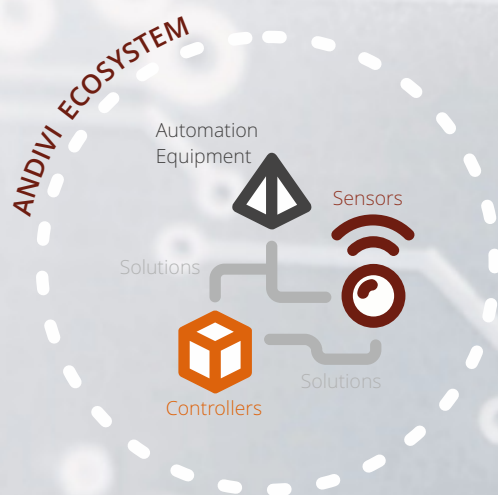
Andivi Product & Solutions

VIA Building & Energy Management

Products	Controllers / Automation Stations	13
	I/O Units	17
	Thermostats	21
	Electronic Hotel Door Locks	29
	Intelligent Hotel Room Equipment	37
	Sensors	45
Solutions	Hotel Room Solutions	77
	VIA Smart Home	85
	▶ VIA Building & Energy Management	93

BUILDING
INTELLIGENCE
THE WAY YOUR
BUILDING
WANTS
IT.

andivi



VIA Building & Energy Management Building & Energy Management System

SAY GOODBYE TO MESSY
AUTOMATION SYSTEMS.

AND HELLO TO THE FUTURE OF
BUILDING & ENERGY
MANAGEMENT SYSTEMS.

VIA started with the idea, that a technology-driven building could operate significantly more energy efficient & with significantly less cost. We remove the complexity that makes other Building control and Monitoring systems – time-consuming and inefficient.

BUILDING MANAGEMENT: SIMPLE.
ENERGY MANAGEMENT: EFFICIENT.

**CONTROL & MONITOR YOUR
BUILDING:** ANYTIME, ANYWHERE

SECURE & FAST

TRY THE DEMO AT
www.andivi.com/via



VIA Building & Energy Management System

VIA Building & Energy Management Features

BUILDING MANAGEMENT

Control temperature, ventilation, lights, shades, windows, gates, ramps and many other systems in your building. The building's original floor plans are uploaded in order to reflect reality.

HVAC

Bring your machine room to your tablet. Interactive HVAC units, ventilation duct units, will allow you to adjust the settings easily. The HVAC units are 100% customizable to any device that is installed in the building.

ENERGY MANAGEMENT

Machine room overview – live data in real-time for insights and informed decisions will allow you to detect faults in the system before they become real issues.

ANALYTICS

Monitor and compare energy consumption, financial savings, CO₂ footprint, etc.

TRENDS & HISTORY

Easy customizable analytics enable gaining insights based on trends & patterns in energy consumption, system performance, etc..

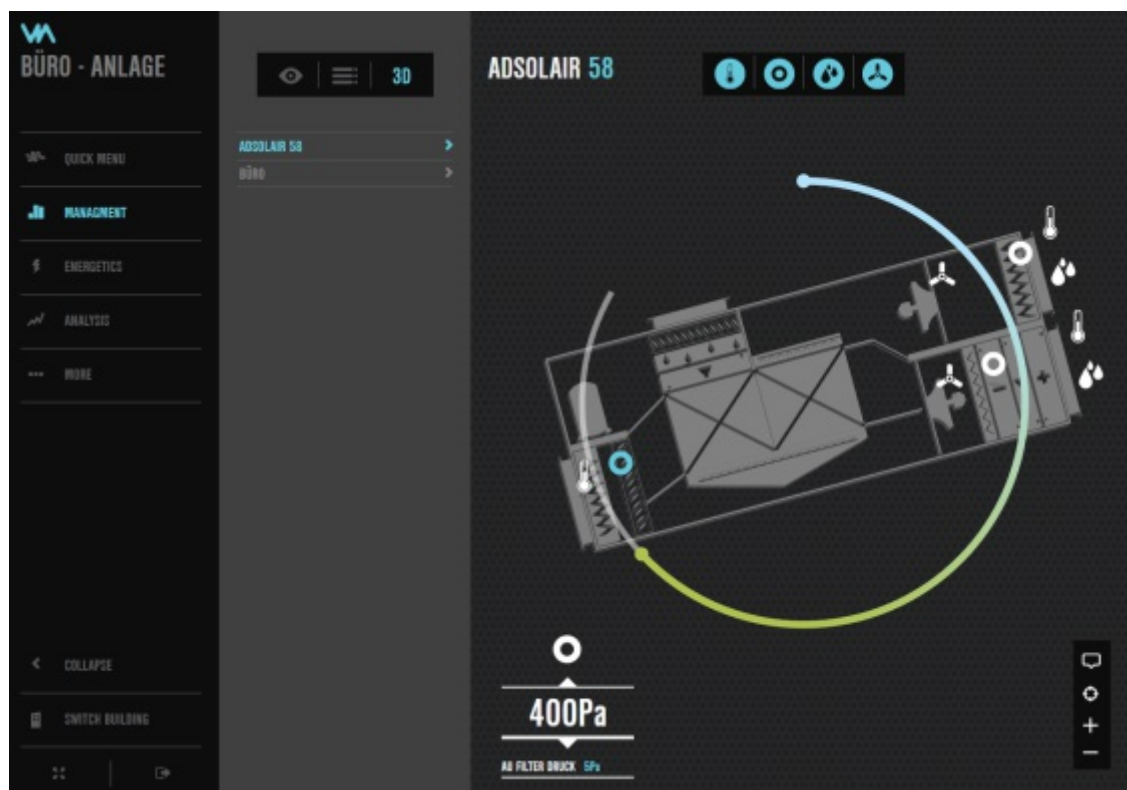
SMART NOTIFICATIONS

VIA notifies you in advance of faults and errors in the system - so you can prevent an issue before it becomes a real problem.

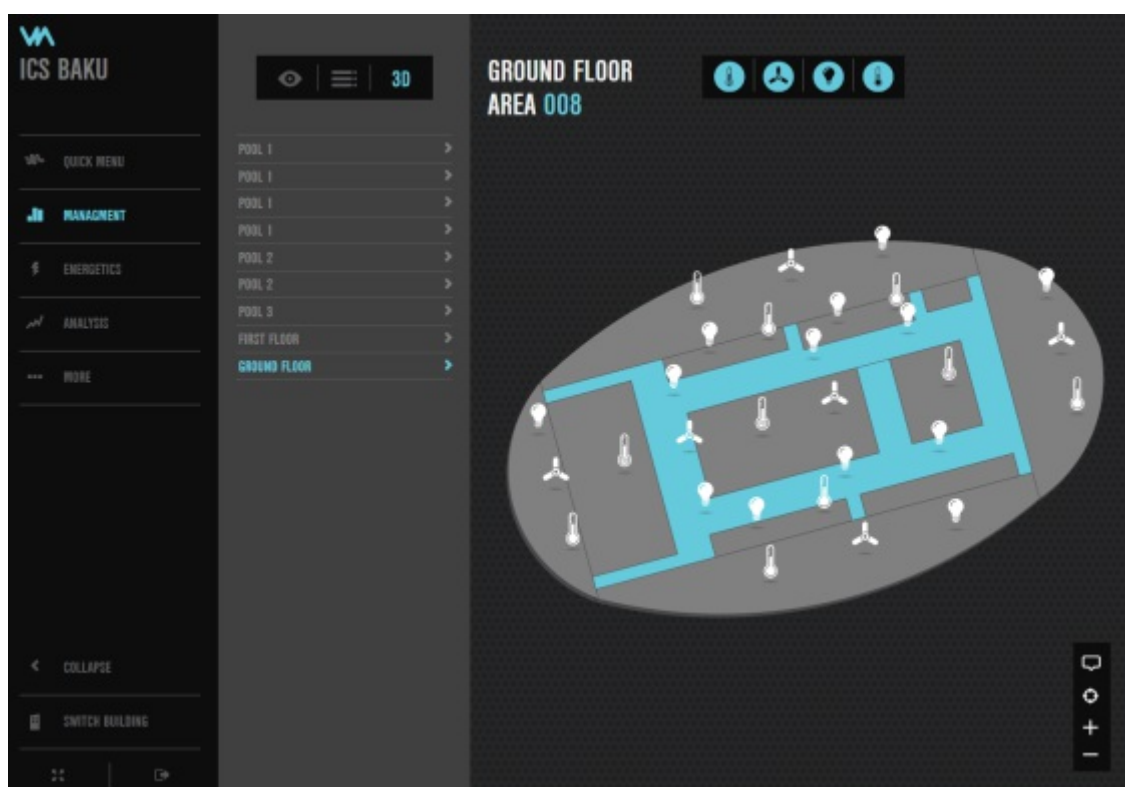


VIA Building & Energy Management System

VIA Building & Energy Management Screenshot examples



Example of an **Air Handling Unit** controlled over a computer through the VIA Web App.



Example of an **Office Building** controlled over a computer through the VIA Web App.

VIA Building & Energy Management Screenshot examples



- 1 Example of **Quick Menu** - the building's key commands sum up in the building's control panel.
- 2 Example of **Machine Room** parameters - live data from every device in the engine room - HVAC units, compressors, heat pumps, etc
- 3 Example of **Trend Data Analysis** for 8 variables (4 analog, 4 digital) - temperature, humidity, compressor and system.
- 4 Example of Electric Energy saving **Analysis** for the last 3 months.
- 5 Example of daily Electric Energy consumption **Analysis**.
- 6 Example of Cooling Energy consumption **Analysis** in the last week.

VIA Building & Energy Management Reliability

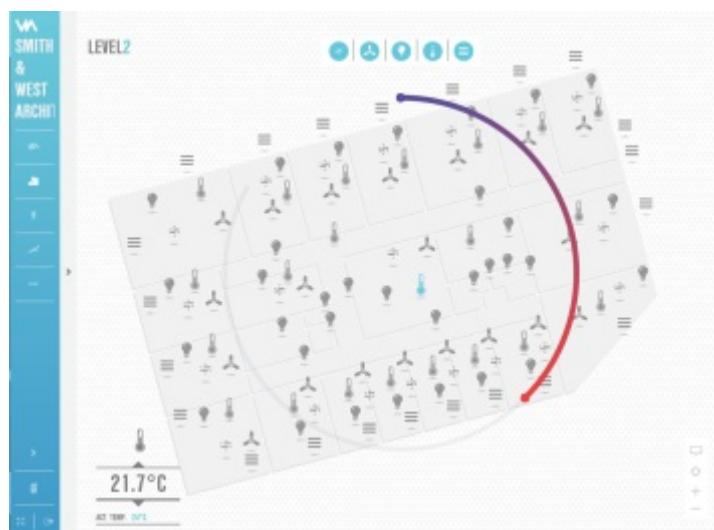


SPEED

VIA's servers stream data from buildings in real-time. While some BMS systems delay up to ten seconds to respond, VIA streams real-time data, so you'll get timely responses.

SECURITY & PROTECTION

VIA uses state-of-the-art security measures when handling your information. Your sensitive information is fully encrypted and securely stored.



VIA Building & Energy Management System

VIA Building & Energy Management

How the System Works



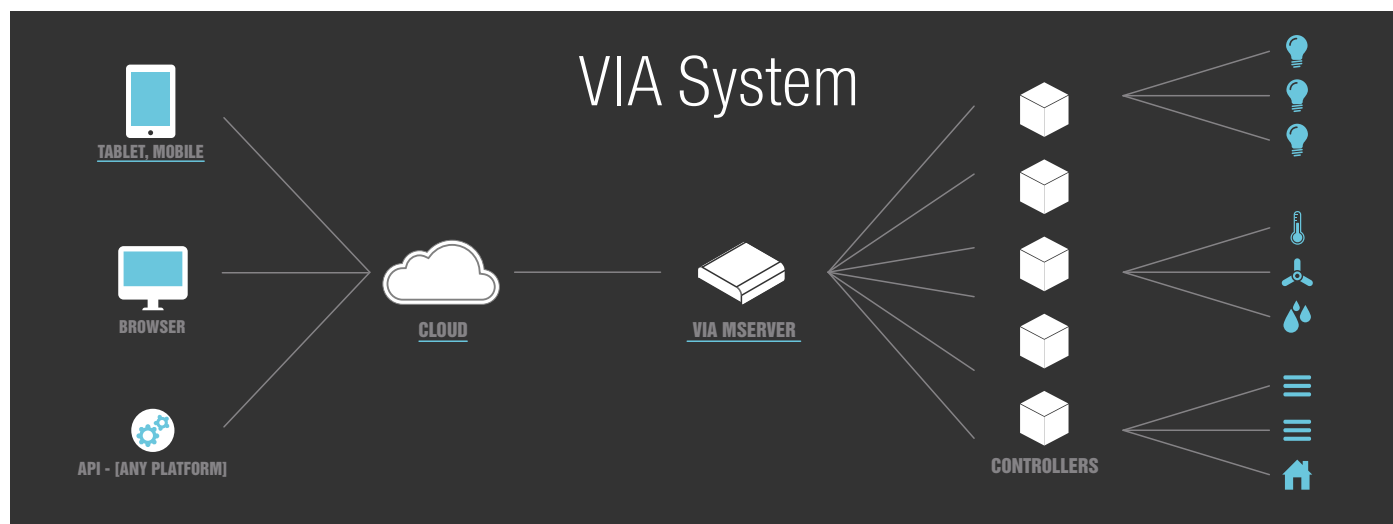
The VIA Solution includes: VIA mServer, VIA Cloud hosting and the VIA WebApp.

VIA MSERVER

VIA mServer connects all controllers in the building, collects all the data and pushes it into the Cloud. So you can access VIA anytime, anywhere.



VIA mServer



Notes

[illegible]

Notes

[illegible]



- Electronic Door Lock
- External Card Reader
- Access Control Power Supply
- Electric Strike
- Energy Saving Switch
- Card Encoder
- Hotel Guest Card

- Temperature Sensors
- Active Temperature Sensors
- Humidity Sensors
- CO₂ & Air Quality Sensors
- Motion & Light Sensors
- Pressure Sensors
- Flow Sensors

- Automation Station
- I/O Unit
- Thermostats

- 360° Hotel Room Solution
- VIA Smart Home
- VIA Building & Energy Management System

- Solution Planning
- Integrator Services & Implementation

www.andivi.com

Building intelligence the way your building wants it.

Building Intelligence The
Way Your Building Wants It.

andivi

Andivi Building Automation Solutions

Andivi d.o.o.

Zagrebška cesta 102
2000 Maribor
Slovenia

-

www.andivi.com

info@andivi.com

-

tel: +386 2 450 31 00

fax: +386 2 450 31 99