



ScanWay.

Advanced automation – modular, versatile, reliable.

In the world of embedded systems, requirements vary widely depending on the specific application. Often compromises must be made between application needs and the characteristics of existing automation solutions.

ScanWay redefines flexibility, merging function and feature seamlessly. By integrating inputs, outputs, protocols, apps and cloud services, your projects will not just take shape—they'll thrive.

Our advanced automation system at your service

ScanWay is an advanced automation system on DIN rail which, thanks to its modular approach, is able to satisfy multiple application needs: The solution consists of a central unit and a wide range of extension modules that can be combined to create the configuration that meets your individual requirements.

ScanWay has 3 operation modes to best fit your management and security requirements:

- local and without a network connection
- connected to a private network
- with cloud connection

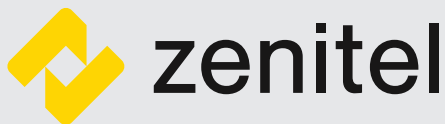
Our apps and interfaces guarantee a reliable and operational management whichever environment you may prefer. In order to respond quickly and to as many needs as possible, the solution has been engineered for immediate deployment and is customizable to your unique needs.

Thanks to its versatility, ScanWay can be used in different contexts such as devices, public and private buildings or critical infrastructures.

Sample applications

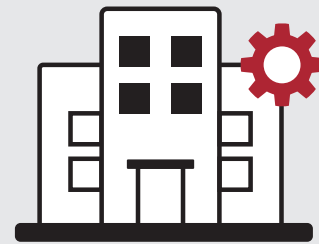
Control functions in interaction with Zenitel systems

- ScanWay extends Alphacom and ICX systems by controlling inputs and outputs via the SLL IP protocol
- Advanced Rule Engine: ScanWay's intuitive graphical interface simplifies the programming of complex applications, surpassing the limitations of traditional event handlers



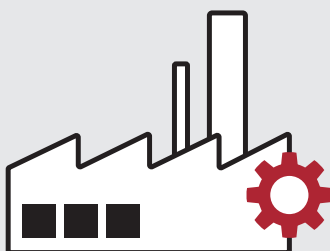
Building automation and Retail

- Lighting management: automate lighting based on schedules or triggers like motion detection or door openings
- Energy Monitoring: Track energy consumption for individual devices or groups
- Access control: manage barriers and doors efficiently



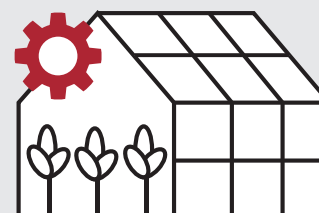
Industrial automation

- Comprehensive Control: Execute complex multi-level rules for input and output control, including AND/OR logic, in near real-time
- Environmental monitoring: Keep track of the consumption and temperature of refrigeration units
- Time Server: Operates as a time server in isolated networks



Agriculture

- Irrigation Systems: automate watering schedules based on soil moisture levels, weather conditions, and further environmental parameters
- Greenhouses: manage windows, ventilation, and composition of nutrients by rules and sensor inputs

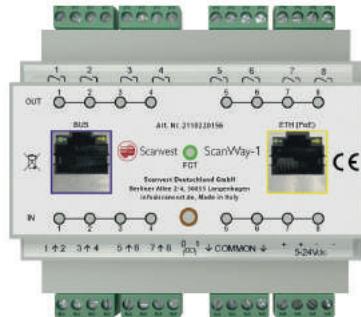


Main unit and extensions

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ScanWay 1 – main unit

- 8 IN contact against GND
- 8 OUT clean contact DC max. 160 W
- Modular control unit for ScanWay automation system
- CPU 120 MHz Arm 4, TI MSP432E401Y
- 256 KB RAM, 1 MB Flash
- 1 Ethernet 10/100 Mbit/s
- 1 ScanBus
- MicroSD
- Power 5-40Vdc or PoE
- Consumption max. 2.5 W



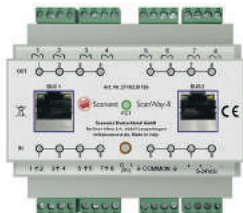
ScanWay consists of a central unit and a range of extension modules that can be combined to create the configuration that meets your individual requirements.

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ScanWay 8 – extension unit

General purpose inputs and outputs – the backbone of automation

- 8 IN contact against GND
- 8 OUT clean contact DC max. 160W



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ScanWay 8-230 – extension unit

Controls lights and appliances keeping an eye on consumption

- 8 IN against phase
- 8 OUT TRIAC max. 230Vac 8A with metering



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ScanWay 4G – extension unit

Creates seamless connectivity – anywhere

- Quectel BG96 cellular module
- 2G 4-band EGPRS, SMS
- 4G 15-band LTE Cat M1/NB1
- Global coverage



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ScanWay ANALOG – extension unit

Handles all analog signals – from tank levels to monitored emergency call buttons

- 2 potentiometric inputs
- 8 outputs 5/12/24Vdc w. metering



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ScanWay ENERGY – extension unit

Tracks consumption and production for homes, solar panels and building distribution lines

- Metering of production and consumption
- Max. 230V 16A per phase
- Configurable 1- / 3-phase



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ScanWay TIME – extension unit

Schedules events to the second – ideal for no-network situations

- Built-in DCF77 time signal receiver
- Frequency 77.5 KHZ
- Good reception even in buildings and basements
- Suitable for Europe incl. Turkey, and Maroc
- Operation as time server for other devices in the local network



ScanBus – ScanWay's proprietary bus system

ScanBus is ScanWay's proprietary bus system. It allows to form a system of up to 64 units easily using standard patch cables.

No special wires, no manual configuration, no additional power sources: just plug the cable and go!



Features:

- Digital bus system with automatic unit detection and addressing
- Any combination of up to 64 extension units can be connected to the main unit

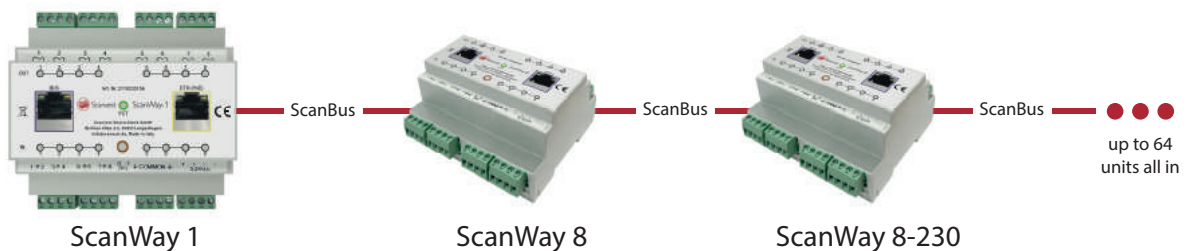
Characteristics:

- Power supply by main unit (5-40Vdc PoE+), additional power can be added to any extension unit if needed (12-40Vdc)
- Max. bus length for I/O modules 1 km, for data modules 5 m
- CAT7 cabling recommended for large distances >10 m

Design your own automation system!

From idea to implementation in a flash – with our ready-to-use modules, you can get your project up and running quickly. Combine the central unit freely with all available extension modules so that your requirements are optimally covered. Our ScanBus creates the connection – quick and easy to implement.

And when it's time to upscale, we will custom-build and integrate your ideal setup into a single device.



ScanWay system features

Built-in

- Item types depend on connected extension units (up to 64)
- Rule automation with support for AND/OR and time conditions
- Events triggered by state change, time, day of week/month, manually
- Unlimited users with access levels (admin, user, guest)
- IP services: DHCP client, DNS client, SNTP and HTTP time client, FTP server, log server (UDP BC), ICMP

Customized

- Customer-specific communication protocols
- Integration of external CAN devices
- Firmware-based event handling
- Software modules developed by Scanvest or by customer
- Local web interface
- 3rd party cloud connections using SSL/TLS 1.2
- Certificate based authentication (local and remote)

How to control the system

System operation:



- Not connected (via SD-card)
- Local IP connection
- Cloud-connected

App:



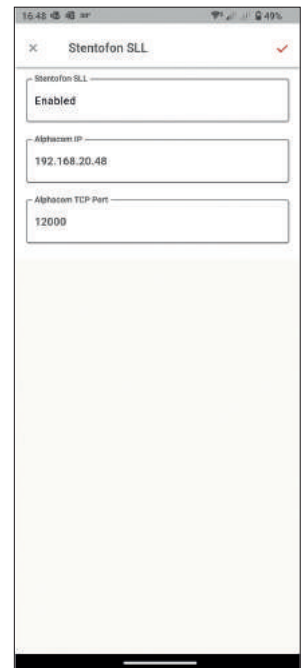
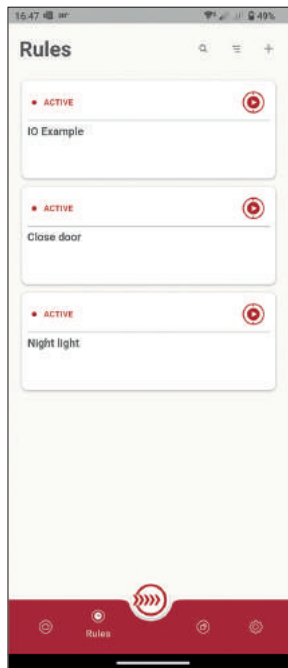
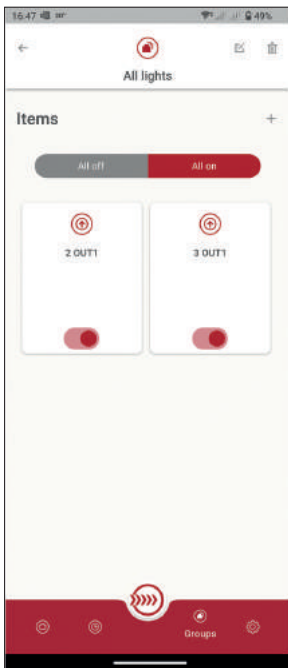
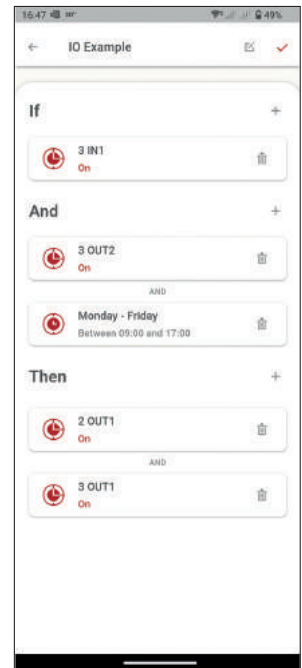
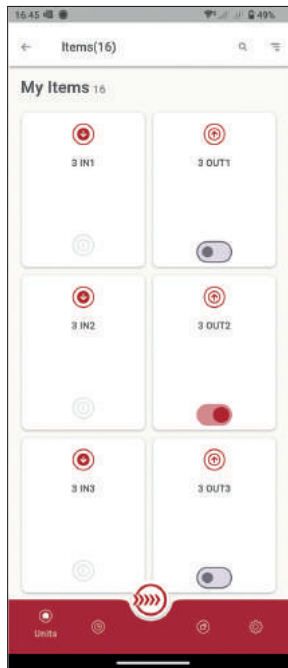
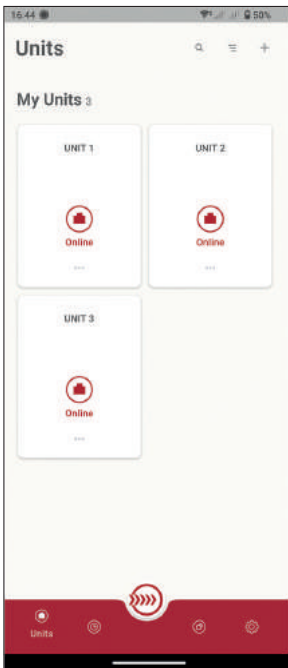
- Real-time status management and IO-control
- Rule management
- System control and log access
- For Windows, iOS, and Android
- Access to ScanWay by local network discovery, ScanWay cloud, or offline by MicroSD card

Service Connectivity



- MQTT
- REST-API
- Azure IoT
- Stentofon Simple Link Layer
- KNX (IP/TP)
- CAN Bus

Easy operation and management via App



Let's connect and find out how ScanWay can fulfill your automation needs!