



e-shelf-labels

SMART.  
DIGITAL.  
EFFICIENT.

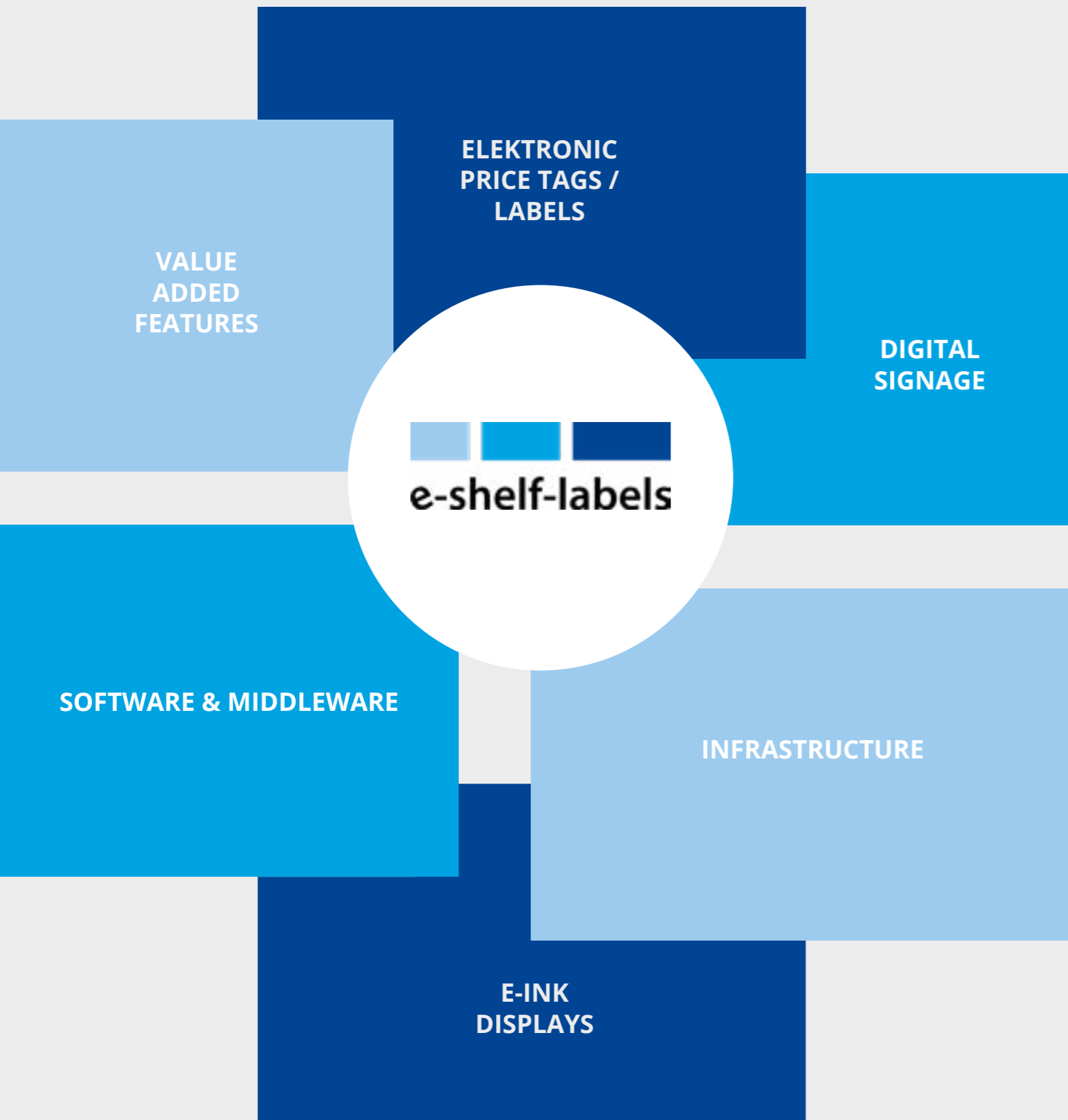
Product catalogue

# ESL SOLUTIONS



# ESL solutions

from a single source



Editorial

## e-shelf-labels

Your partner for electronic signage and labelling

For the digital transformation, electronic identification and auto-ID play an enormous role in retail as well as in gastronomy, tourism, industry and public spaces. With the appropriate hardware components and software applications, companies across all industries can make their work processes more productive and effective in order to meet modern demands and rapidly growing competition.

e-shelf-labels has made it its mission to accompany and support companies on their way to digitalisation with the best possible ESL solutions. Our portfolio ranges from small electronic labels to large digital billboards. In the catalogue you will find an overview of our products and services. Each hardware element is only one part of our overall solution and our customer service, which ranges from conception to realisation and implementation throughout Europe and the world to long-term support.

Choose e-shelf-labels if you are looking for a partner who not only sells individual components, but understands ESL systems as an overall concept consisting of hardware, software and infrastructure.

Have we piqued your interest? Then contact us. We will be happy to advise you.

Enjoy discovering our portfolio.



# Products

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# Electronic price tags & labels

Paper price labelling is a thing of the past. ESL solutions save costs, time and resources and can do much more than simply display prices. In modern retail, companies are struggling to remain competitive, both against competitors in brick-and-mortar retail and in e-commerce. This requires up-to-date and error-free prices as well as an increased attractiveness of products. Both are guaranteed by electronic price tags, which promise dynamic price labelling, diverse product information and interactive elements thanks to NFC technology. All these qualities also make them particularly attractive for use in industry to optimise or even automate processes in inventory management or production workflows. Robust, stable, power-saving and always easy to read, they are the future of price and product labelling.

## VUSION

The modular VUSION series on an e-paper basis can be customised in its layout and impresses above all with its easy installation, very good readability and up to 10 years of battery life. In addition, special versions such as the freezer models or the chemical-resistant labels are also available.

## Advantages

- 7000 to 10.000 update processes
- 2,4 GHz (Cloud)
- Can be used from +10°C to +40°C
- 180° viewing angle
- Available in white and anthracite
- 7 colors LED
- NFC
- Chemical resistant



### VUSION 1.6 Inch

Size: 48 x 36.6 x 11.4 mm  
Display: 152 x 162 pixel  
NFC  
7 colors LED



### VUSION 2.2 Inch

Size: 67.9 x 35.7 x 11.4 mm  
Display: 212 x 104 pixel  
NFC  
7 colors LED  
Usable from -25° - 0°



### VUSION 2.6 Inch

Size: 80 x 41.1 x 11.4 mm  
Display: 296 x 152 pixel  
NFC  
7 colors LED  
Usable from -25° - 0°

MARKED SIZES ALSO AVAILABLE AS FREEZER MODELS



### VUSION 4.2 Inch

Size: 104.5 x 82.5 x 12.2 mm  
Display: 400 x 300 pixel  
NFC  
7 colors LED



### VUSION 4.5 Inch

Size: 128.5 x 51.8 x 11.8 mm  
Display: 480 x 176 pixel  
NFC  
7 colors LED



### VUSION 7.4 Inch

Size: 175.3 x 123.4 x 13.2 mm  
Display: 800 x 480 pixel  
NFC  
7 colors LED



### VUSION 9.7 Inch

Size: 227.6 x 169.5 x 13.5 mm  
Display: 672 x 960 pixel  
NFC  
7 colors LED

### VUSION 12.2 Inch

Size: 218.3 x 265.8 x 7.4 mm  
Display: 768 x 960 pixel  
NFC



## NEWTON

The multifunctional NEWTON labels with E-Ink displays in BWR are also available in selected sizes as Freezer models and as NEWTON Lite without buttons. Lightweight and efficient, they are ideally suited for use in retail and industry.

## Advantages

- 7000 to 10.000 update processes
- 2 configurable multifunction buttons
- 2,4 GHz / 868 MHz (Cloud or on Premise)
- IP67 and particularly shock-resistant
- Can be used from +10°C to +40°C
- 180° viewing angle
- Available in white and black
- 7 colors LED
- NFC



### NEWTON 1.6 Inch

Size: 36.7 x 45.0 x 13.1 mm  
Display: 200 x 200 pixel  
NFC  
7 colors LED



### NEWTON 2.2 Inch

Size: 67.1 x 37.4 x 13.1 mm  
Display: 296 x 160 pixel  
NFC  
7 colors LED  
Usable from -25° - 0°



### NEWTON 2.6 Inch

Size: 79.3 x 42.4 x 13.1 mm  
Display: 360 x 184 pixel  
NFC  
7 colors LED  
Usable from -25° - 0°



### NEWTON 2.9 Inch

Size: 86.0 x 41.3 x 13.1 mm  
Display: 384 x 168 pixel  
NFC  
7 colors LED  
Usable from -25° - 0°

MARKED SIZES  
ALSO AVAILABLE  
AS FREEZER  
MODELS



### NEWTON 4.3 Inch

Size: 130.3 x 42.4 x 13.9 mm  
Display: 522 x 152 pixel  
NFC  
7 colors LED



### NEWTON 4.2 Inch

Size: 98.1 x 83.8 x 14.5 mm  
Display: 400 x 300 pixel  
NFC  
7 colors LED



### NEWTON 7.5 Inch

Size: 125.0 x 183.0 x 15.2 mm  
Display: 800 x 480 pixel  
NFC  
7 colors LED



### NEWTON 11.6 Inch

Size: 192.0 x 268.0 x 21.9 mm  
Display: 640 x 960 pixel  
NFC  
7 colors LED

## NEWTON LITE

The focus of the NEWTON Lite series is on the classic functions of a digital label. The NEWTON Lite signs do not have any function keys, but otherwise guarantee all the other advantages of the NEWTON signs.

### Advantages

- 7000 to 10.000 update processes
- 2,4 GHz / 868 MHz (Cloud or on Premise)
- 180° viewing angle
- Available in white and black
- 7 colors LED
- NFC



### NEWTON LITE 1.6 Inch

Size: 37.21 x 46.81 x 14.00 mm  
Display: 200 x 200 pixel  
NFC  
7 colors LED



### NEWTON LITE 2.2 Inch

Size: 71.22 x 37.21 x 14.00 mm  
Display: 250 x 122 pixel  
NFC  
7 colors LED



### NEWTON LITE 2.6 Inch

Size: 80.27 x 43.03 x 14.00 mm  
Display: 360 x 184 pixel  
NFC  
7 colors LED



### NEWTON LITE 2.9 Inch

Size: 87.48 x 43.03 x 14.00 mm  
Display: 384 x 168 pixel  
NFC  
7 colors LED

## NEWTON 4-COLOR & 7-COLOR

The powerful labels get more colours for visual design in the NEWTON Color range. The NEWTON 4-Color can display content in black, white, Red and Yellow, while the NEWTON 7-Color labels can display White, Black, Red, Yellow, Blue, Green and Magenta.

### Advantages

- 7000 to 10.000 update processes
- 2 configurable multifunction buttons
- 2,4 GHz (Cloud or on Premise)
- IP67
- 180° viewing angle
- Available in white and black
- 7 colors LED
- NFC



### NEWTON 4 COLOR 1.64 Inch

Size: 41.96 x 54.26 x 13.4 mm  
Display: 168 x 168 pixel  
NFC  
7 colors LED



### NEWTON 4 COLOR 2.4 Inch

Size: 80.41 x 44.36 x 13.4 mm  
Display: 296 x 168 pixel  
NFC  
7 colors LED



### NEWTON 4 COLOR 3.0 Inch

Size: 98.60 x 44.54 x 13.4 mm  
Display: 400 x 168 pixel  
NFC  
7 colors LED



### NEWTON 4 COLOR 4.4 Inch

Size: 107.83 x 92.23 x 13.25 mm  
Display: 512 x 368 pixel  
NFC  
7 colors LED



### NEWTON 4 COLOR 8.2 Inch

Size: 140.67 x 209.34 x 14.95 mm  
Display: 1024 x 600 pixel  
NFC  
7 colors LED



### NEWTON 7 COLOR 6.0 Inch

Size: 133.0 x 109.0 x 14.7 mm  
Display: 600 x 448 pixel  
NFC  
7 colors LED

# Retail solutions

## VIVID SHELF EDGE

The resource-saving LCD technology with touch function enables an innovative and interactive product presentation. The label is mounted on power rails that can be adjusted according to the viewing angle and customer preferences.

### Advantages

- Dynamic product labelling
- Modern LCD display
- Interactive sales assistant
- Touch & Sensor
- Gesture control possible



### Vivid Shelf Edge

Size: 98 x 64 x 10 mm  
 Display: 480 x 320 pixel  
 Wi-Fi  
 9-24V

## DIGITAL SHELF WOBLER

The specially animated e-paper displays can point out new products and discounts or convey advertising messages. The animation works through the interaction between the printed overlay and underlying segments that are individually controlled.

### Advantages

- Increased attractiveness & attention
- Strengthened sales promotion
- 180° viewing angle
- Very low power consumption
- Individually customisable in colour, shape & size
- Easy installation and commissioning
- Out-Of-The-Box product



### Digitaler Shelf Wobbler

Size & layout individually customisable

## VUSION Fashiontag

Size: 41.1 x 80 x 11.4 mm  
 Display: 152 x 296 pixel  
 NFC



## FASHIONTAGS

Specially developed for the fashion and textile industry, fashion tags are attached directly to the goods in connection with article surveillance, among other things. Thanks to near-real-time pricing and an integrated NFC chip, they always show current information such as prices or available sizes.

### Advantages

- Display of currently available goods
- Time saving for customer service
- NFC access / smartphone connection
- Near Real-Time-Pricing
- Uniform prices online and offline for competitiveness and flexibility



## NEWTON X

Size: 28.8 x 71.3 x 5.95 mm  
 Display: 144 x 200 pixel  
 NFC  
 7 color LED

## PEG HOOK LABEL / NEWTON X

Peg Hook Labels are minimalist price tags specially designed for wholesale Eurohooks. They impress with their small size and are particularly suitable for use in areas where many items are offered in a small space.

### Advantages

- 8 times faster real-time updates
- Battery life up to 3 years
- Location Based Services
- Individual branding possible
- NFC

# Digital Signage

## VIDEO BARS & STRETCH-DISPLAYS

Video rails with touch function enable animated and full-colour advertising and information options directly at the point of sale in the form of images in colour, videos, GIFs, QR codes, textual advertising messages or detailed product information. This turns every shelf or shop window into an eye-catcher.

### Advantages

- Dynamic product presentation
- Modern, full color LCD display
- Attractive product presentation with videos, images and GIFs
- Possible touch function (depending on manufacturer)

### V:RAIL 12001

Size: 1215.4 x 72 x 29.47 mm  
Display: 3840 x 160 pixel  
Wi-Fi & Bluetooth



### V:RAIL 09001

Size: 898 x 67.53 x 24.07 mm  
Display: 2880 x 158 pixel  
Wi-Fi & Bluetooth



### V:RAIL 06001

Size: 603.2 x 67.5 x 34.6 mm  
Display: 1920 x 158 pixel  
Wi-Fi & Bluetooth

### NEWTON TOUCH 29 Inch

Size: 712.2 x 214.2 x 10.1 mm  
Display: 1920 x 540 pixel  
Wi-Fi / Micro HDMI



### NEWTON TOUCH 23 Inch

Size: 593.60.4 x 19.6 mm  
Display: 1920 x 158 pixel  
Wi-Fi / Micro HDMI

## DIGITAL BILLBOARD A-FRAME

The 43 inch full HD displays enable service and good visibility at all times. With a touch function for interactive search functions, the advertising boards also serve as digital product advisors, signposts or, in the case of hotels or gastronomy, as menu boards or information boards.

### Advantages

- Attractive advertising material
- Interactive product advice
- Entrance Control System
- Indoor & outdoor solution available
- Intuitive CMS SCREEENR software

### A-Frame 43 Inch (Indoor oder Outdoor Lösung verfügbar)

Display: 1080 x 1920 pixel  
Wi-Fi



### elo Touch 10 Inch

Size: 252.9 x 169.0 x 22.1 mm  
Display: 1280 x 800 pixel  
NFC



### elo Touch 15 Inch

Size: 337.7 x 249.7 x 22.3 mm  
Display: 1920 x 1080 pixel  
NFC



### elo Touch 22 Inch

Size: 524.8 x 324.8 x 32.5 mm  
Display: 1920 x 1080 pixel  
NFC

## ELO TOUCH & WALLABY

The touchscreen monitors including cloud-based management software offer versatile application possibilities, such as a digital customer advisor in retail, an information board or check-in service in a hotel or a menu board and reservation platform in the catering industry. By combining them with the Wallaby self-service stand, a 15- or 22-inch touchscreen solution can easily be set up as a self-service area - including payment and printing functions.

### Advantages

- High storage capacity
- Multitouch display
- High durability
- NFC
- Compatibility with hardware components for self-service/self-service check-out
- Connection to merchandise management system

### WALLABY Self-Service Floor stand

Size: 562.43 x 370 x 1192.8 mm  
Weight with base: 68.12 lbs / 30.9 kg

### WALLABY Self-Service Cash desk stand

Size: 295 x 230 x 431.96 mm  
Weight: 24.69 lbs / 11.2 kg





# E-Ink Displays

Displays based on e-paper technology are becoming more and more popular in the labelling of prizes, rooms or public information. The reason for this is the convincing advantages over print products or LCD boards. E-ink displays always promise the best readability, even in bright light and at poor reading angles, which is an enormous advantage especially in brightly lit rooms, high shelves or outdoor areas. Furthermore, they convince with low power consumption. Since E-Ink is „bistable“, power is only consumed when the display changes. Thus, the displays remain in use for many months and can easily be operated with solar energy.

In addition, depending on the area of application, there are different sizes and various solutions with display in greyscale or up to 60.000 colours.

On request, we also offer special solutions for public transport or special indoor and outdoor applications with optional photovoltaic power.



**Visionect Place & Play  
32 Inch**  
Size: 707.2 x 413.8 x 13.4 mm  
Display: 2560 x 1440 pixel  
16 greyscales  
Wi-Fi

**Visionect Place & Play  
13 Inch**  
Size: 297 x 230 x 10.5 mm  
Display: 1600 x 1200 pixel  
16 shades of grey  
wi-fi



**Visionect 6 Inch**  
Size: 158.8 x 123.8 x 13.1 mm  
Display: 1024 x 758 pixel  
16 greyscales  
Wi-Fi



**Visionect Joan 6 Pro**  
Size: 104.2 x 142.9 x 11.1 mm  
Display: 1024 x 758 pixel  
16 greyscales  
Wi-Fi



**PHILIPS Signage  
Solutions Tableaux**  
Size: 25.3 inch  
Display: 1800 x 3200 pixel  
60000 colours  
WLAN 2.4 GHz and 5 GHz

# Digital Room Signage

Digital door signs are familiar to many from modern offices, but they are also used in hotels, trade fairs, conference buildings or in the healthcare sector. Within a very short time, occupancies, appointments or changes can be taken over and displayed so that employees and guests are always up to date. The advantages of digital signs lie not only in their central administration, but also in the e-paper technology. This always ensures a high-quality display of graphics and texts as well as optimal readability with very low power consumption. This makes digital door signs a time- and cost-saving alternative to classic paper signs with a sustainable character.

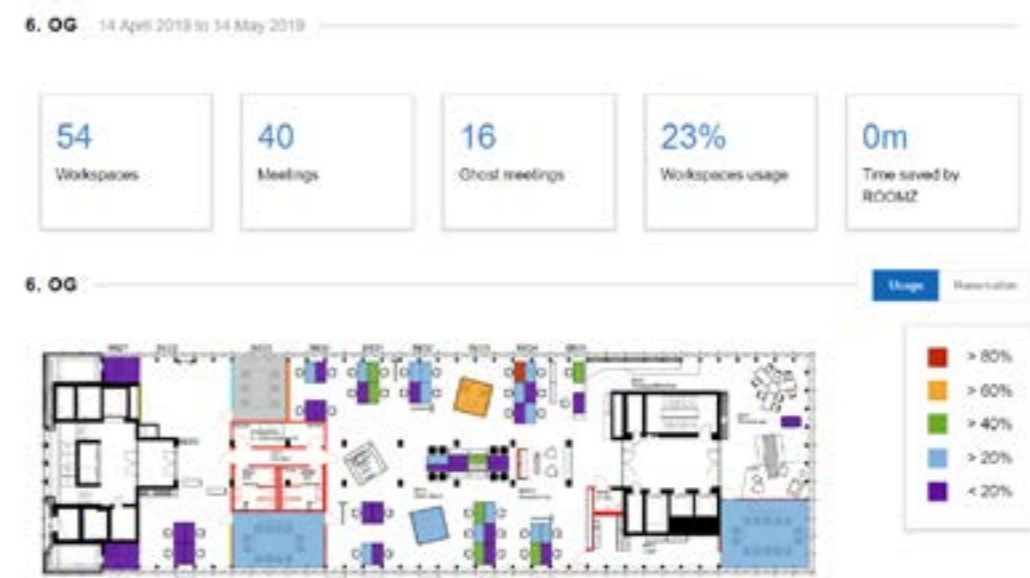


**ROOMZ**  
Size: 196 x 165 x 7 mm  
Display: 1024 x 768 pixel  
Wi-Fi

## ROOMZ

ROOMZ represents a modern look, practical management and connection to internal calendar systems. The special feature is the possible use of sensors. These check whether meetings are actually taking place and automatically adjust the display.

As an accessory, the ROOMZ Solar Kit is optionally available, with which the ROOMZ display is operated only with daylight (300 lux light).



# Industrial Applications

In addition to trade and tourism, many ESL solutions are specifically designed for use in industry. These include, for example, electronic labels that promise easy scanning and thus more efficient work processes. At the same time, they can be equipped with various tracking technologies to enable faster picking processes or, in combination with SmartBins, to optimise inventory management. Digital IoT platforms, such as those from PDi Digital, serve as the basis for all networked ESL processes in the industry. The decisive factor for electronic labels is always the connection to existing ERP structures (SAP, MS Dynamics Navision, etc.) as well as handhelds to ensure smooth processes.

## POSSIBLE AREAS OF APPLICATION:

- Process digitisation / basic digitisation
- Shelf labelling
- Digital consignment notes
- Pick-to-light / Pick-by-light / Put-by-light
- Digital production twins & plant management
- Data hub
- Warehouse management
- Sequence documents
- e-Kanban
- Electronic Blank Escort Cards
- Electronic order papers
- Machine allocation plans
- Storage location identification
- Automated inventory management



DISCOVER ALSO  
HANDHELDS,  
INDUSTRIAL SCANNERS  
AND MORE IN  
OUR AUTO-ID 24/7  
ONLINE SHOP

## NEWTON SUBGIGA LABELS

SOLUM's NEWTON series labels are a modern industrial solution that enables companies to make their internal logistics or supply chain processes more efficient and productive. They operate on an 868 MHz frequency, which can be used as a technological preference or if the 2.4

GHz band is occupied by other applications. With real-time stock control via the e-shelf labels and simplified scanning capabilities, optimised workflow planning and improved inventory tracking is guaranteed.



AVAILABLE IN  
2.9", 4.2", 7.5", 11.6"

## PICK-BY-LIGHT LABELS

Pick-by-light labels are also optimised for industrial applications. On the one hand, they are particularly robustly built and, on the other hand, they have an enlarged front button with an integrated LED. This can be activated to indicate the position of the products on the shelf and make it easier for employees to find parts. By pressing the button, various operations can be confirmed (e.g. pick / put-by-light). In addition to the large LED button on the front, the label has side buttons that are flexibly programmable.



### Newton Pick-By-Light Label 4.3 Inch

Size: 130.3 x 42.4 x 13.9 mm  
Display: 522 x 152 pixel  
NFC

## SMARTBIN FLEX / SMARTLABELS

SmartLabels in cooperation with SmartBins enable the automation of many processes in logistics management, such as reordering. The decisive factor is the link to software solutions such as ARIMS from PDi Digital and existing merchandise management systems.

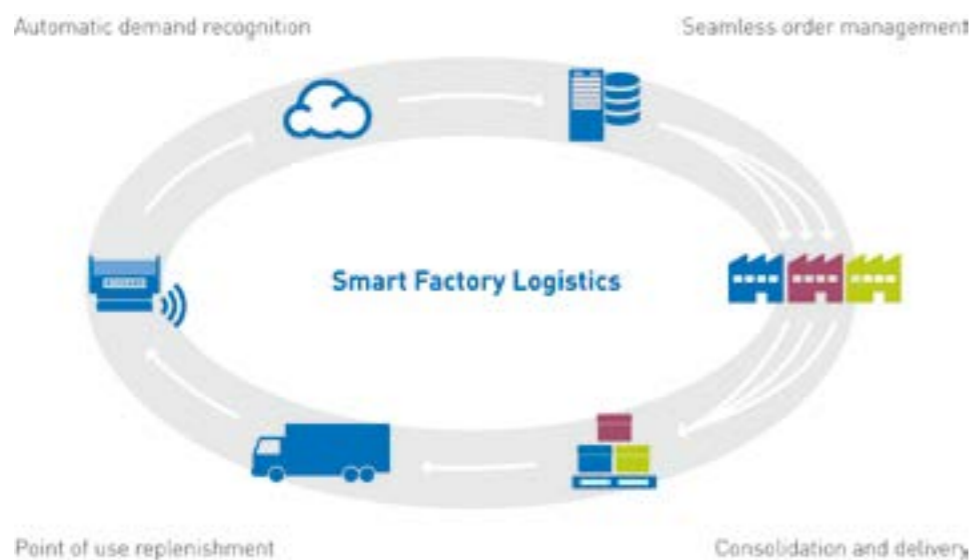
SmartBins function fully automatically through weight sensors that are permanently connected to the containers. If the stock level falls below a defined quantity, a restock process is automatically triggered. This saves companies time, reduces the error rate and guarantees optimal stock levels at all times.



**SmartBin Flex**  
Size: 10", 15", 22"  
Wi-Fi



**SmartLabel**



## Quupp-PDI-Solutions

With the Quuppa PDi solution, which enables accurate indoor positioning, data can be collected for real-time location-based information. By combining positioning technology with real-time location and e-ink label, new processes in the context of Industry 4.0 can be mapped better and more efficiently.

Meanwhile, the sepioo® SaaS platform collects data to create a digital map with real-time location and display information. This can be used to trigger automated actions when objects travel a defined distance or when they enter or leave geofenced areas.



## SEPIOO IIOT PLATFORM

The sepioo software platform is designed for integration into multiple use cases and enables the collection of data from an unlimited number of labels and sensors as well as fast updates and real-time communication with other elements of the system.

Thanks to its modular design, the software can be integrated into virtually any industrial environment and works seamlessly with a wide range of hardware products and technologies such as NB-IOT or NFC.

## SEPIOO

sepioo labels from PDi Digital have been developed specifically for the sepioo IIOT platform, and guarantee real-time data transmission. Their areas of application include picking processes in Industry 4.0, inventory management or material management in health care facilities.

### Advantages

- Quuppa tracking technology
- Real-time information transmission
- IP67
- Very low power consumption
- Accelerometer & temperature sensor
- optimal compatibility with the sepioo IIOT platform

#### sepioo 7.4 Inch

Size: 175.3 x 123.4 x 13.2 mm  
Display: 800 x 480 pixel  
NFC



#### sepioo 9.7 Inch

Size: 227.6 x 169.5 x 13.5 mm  
Display: 672 x 960 pixel  
NFC



#### sepioo 12.2 Inch

Size: 218.3 x 265.8 x 15.9 mm  
Display: 768 x 960 pixel  
NFC



#### sepioo 4.2 Inch

Size: 104.5 x 82.5 x 12.2 mm  
Display: 400 x 300 pixel  
NFC



#### sepioo 2.6 Inch

Size: 80 x 41.1 x 11.4 mm  
Display: 296 x 152 pixel  
NFC

## SEPIOO NFC & BUTTON LABELS

The sepioo D2.6 B and D.27 B labels are each equipped with 2 or 4 buttons that can be individually programmed.

The sepioo NFC labels without buttons and LED are equipped with NFC technology for writing on the labels without access point infrastructure.

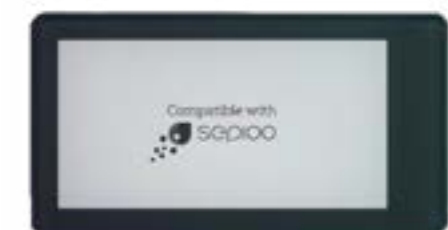
### Advantages

- Real-time information transmission
- IP67
- Very low power consumption
- Accelerometer & temperature sensor
- Optimal compatibility with the sepioo IIOT platform



#### sepioo D2.6 B

Size: 80.1 x 40.4 x 13.1 mm  
Display: 296 x 152 pixel  
NFC



#### sepioo D2.6 NFC

Size: 79.2 x 41.0 x 6.5 mm  
Display: 296 x 152 pixel  
NFC

# Infrastructure

To function optimally, every ESL and digital signage solution needs a corresponding infrastructure. This includes both software and hardware components that enable the exchange between the electronic signs and the customer connection, be it PC or handheld.

Our portfolio includes corresponding access points that act as communication links between the individual elements. Thus, the data exchange with the digital labels runs via a radio connection, while the communication with mobile devices works via W-LAN or via an API interface on the PC.



## ACCESS POINTS

A central element of the infrastructure is the access point, which acts as a communication point between electronic price tags, desktop PCs and mobile devices. Most access points operate in the 2.4 GHz range, as do the corresponding labels. For the frequency range 868 MHz, which is common in the industry, we offer so-called Subgiga Access Points.

In addition, there is the possibility of setting up dongle solutions on existing access point infrastructures from Cisco, Arruba, Lancom and others. We will be happy to advise you personally on compatible models.



**SOLUM Gateway**  
For NEWTON Labels

**SES-imagotag Access Point**

For VUSION Labels



# Cloud Solutions

For an efficient omnichannel experience in brick-and-mortar retail or flexible data collection in industry, we recommend our cloud solutions. With them, data can be securely captured and linked regardless of location. Further advantages of cloud services are fast scalability on a national and international level as well as low infrastructure costs. With our many years of experience in IT systems, we support companies in implementing cloud solutions with the highest level of data security.

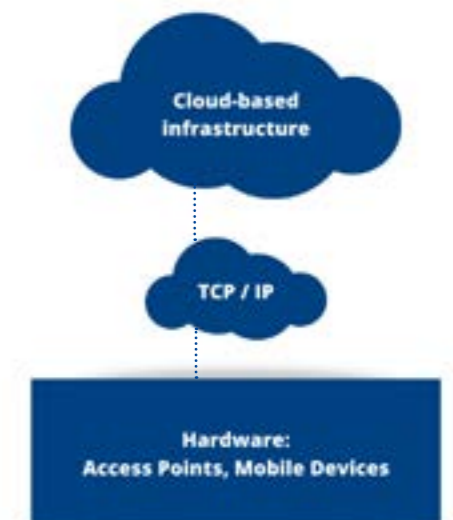


## RETAIL

The use of cloud-based retail IoT platforms guarantees a flexible and powerful solution for data integration for digital labels with management of different sources such as ERPs, e-commerce platforms or POS systems as well as an overview of store activities in real time.

## INDUSTRY

Work processes in Industry 4.0 require flexible and agile structures as well as real-time monitoring of all interfaces to detect problems in time. Cloud-based IoT platforms enable real-time reports on the status of the infrastructure as well as location-independent management of the labels.



# Software

Another important part of the ESL infrastructure is the software needed to operate digital price tags and displays. We offer basic software solutions as part of the technical infrastructure as well as software solutions for other networked processes such as mobile payment, automated shelf monitoring or interactive product advisory systems.

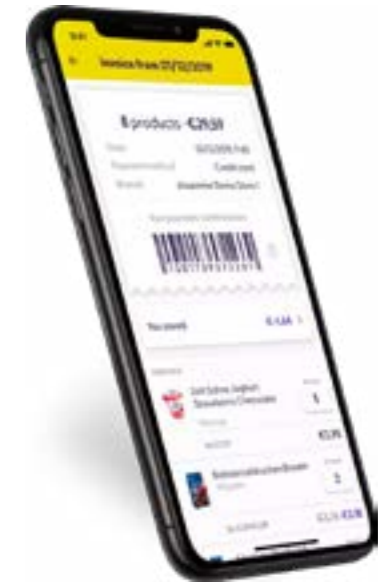
## ESSENTIAL SOFTWARE - VUSION

The VUSION Cloud is used for electronic price labels in the 2.4 GHz system. It can be used to generate templates, create interfaces or manage VUSION labels and check their functionality.



## SCAN & GO WITH MOBILE PAYMENT

With Scan & Go, customers can not only conveniently scan their goods themselves, but also use Mobile Pay solutions to pay directly, no matter where they are in the shop. For Scan & Go, hardware components in the form of scanners are used as well as suitable mobile pay applications and connections to merchandise management.



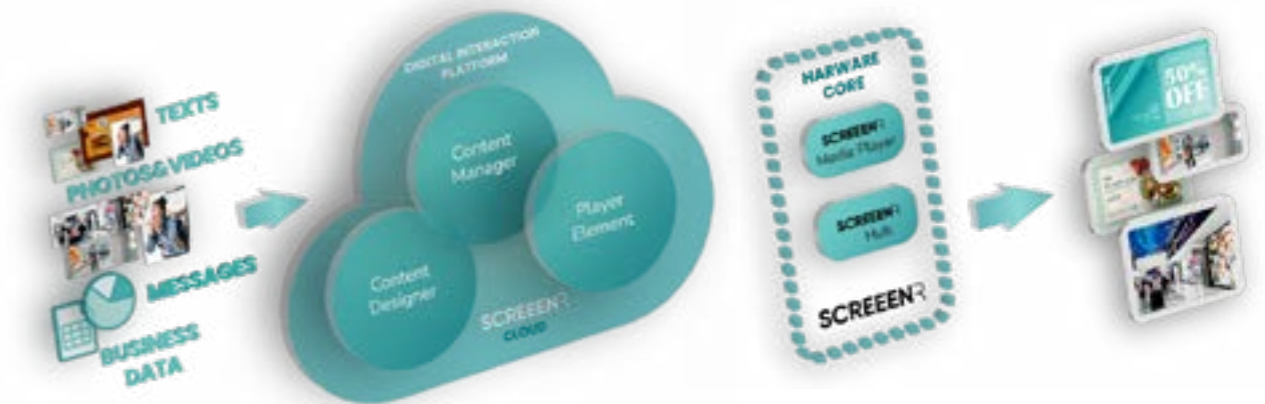
## SCREENR DIGITAL SIGNAGE PLATFORM

The SCREENR digital signage platform is a content designer, content manager and player for digital signage at the same time. With the interaction platform, content for several displays can be created and managed independently. Working with a single solution saves time and training.



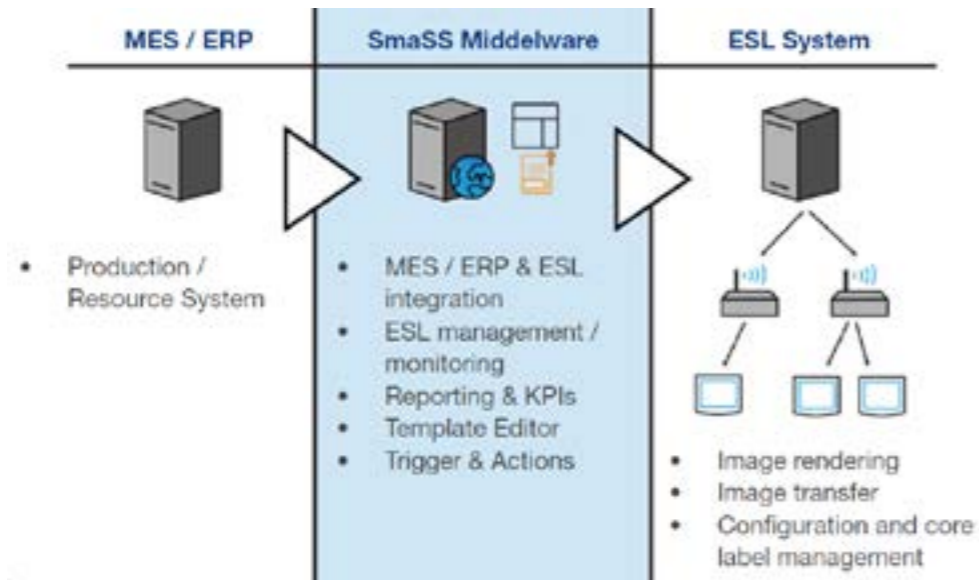
## ESSENTIAL SOFTWARE - NEWTON

AIMS is the basic software for NEWTON labels in the 2.4 GHz as well as in the 868 MHz frequency range. The Advanced Information Management System enables the management of labels, products, inventories, users and data in one programme. This also includes an integrated label designer. AIMS is available both on-site and in the cloud or as a SaaS server. In addition, there is a mobile application for on the go.



## SMASS MIDDLEWARE

A middleware solution serves as a medium for communication between digital signage and existing ERP or leading background systems. Our SmaSS Middleware is divided into three areas of application: SmaSS Logistics, SmaSS Catering and SmaSS Office.



### SmaSS Logistics

- System monitoring
- Visualisation
- Reporting & KPIs



### SmaSS Catering:

- Central administration
- Menu planning
- Table reservations
- Display of ingredients, allergens and colorings

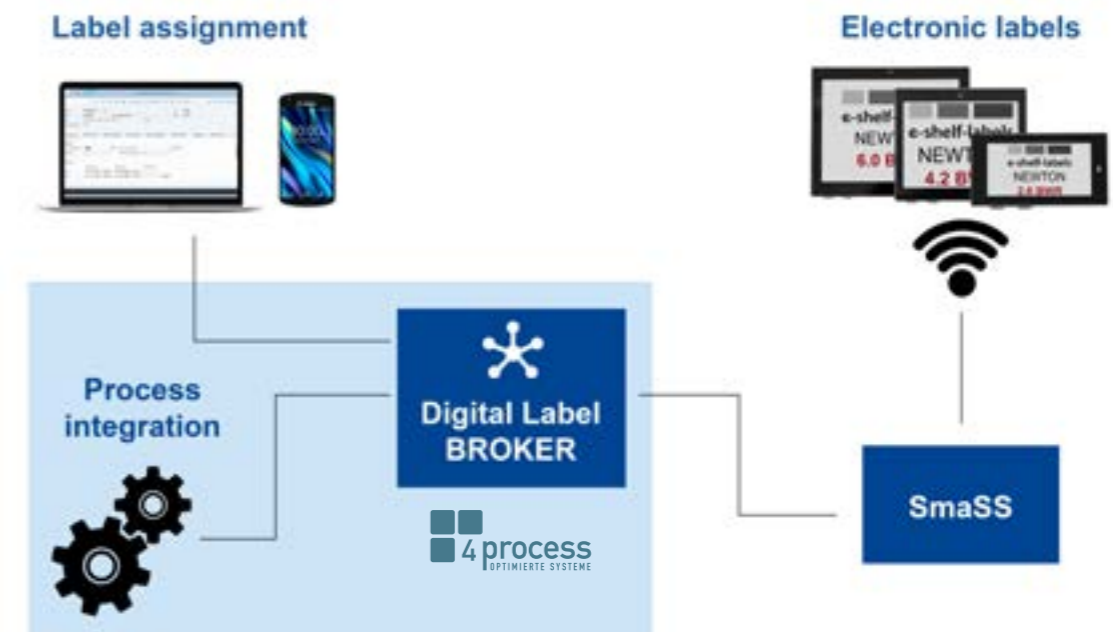
### SmaSS Office:

- Appointment booking
- Automatic updates
- Administration via web interface



## SAP ERP - E-INK LABEL ADD-ON

For automatic and flexible production, data must be available electronically in real time and construction instructions must be precisely mapped within short cycle times. Through the process-related integration into the customer's operational information system, internal goods flows in warehouse and logistics processes can be controlled more efficiently and with less strain on resources with the help of the SAP ERP - E-ink Label Add-on. The data stored in the SAP system can be transferred to the electronic shelf labels (ESL) via the link with the SmaSS middleware and, for example, current stock levels in the company can be shown on the displays.



### Advantages of the SAP ERP CONNECTOR

- Paperless industry and data in real time
- Automation of process steps thanks to dynamic integration of digital labels
- Quick integration into standard processes (out-of-the-box integration)
- Flexible integration into complex processes
- Safeguarding of processes through feedback of label updates into your ERP system
- Future-proof also for SAP S/4HANA on-premise and cloud

### OTHER ERP INTEGRATIONS

- Microsoft Dynamics
- Navision

# Software from ekko

The ekko software allows the efficient digitalisation of production facilities by means of electronic labels up to Industrie 4.0 applications. Starting from the smallest storage place without system connection up to complex, internationally networked productions. Based on the ekko coordinate system, information from orders, processes, machines and people is collected. From this, relevant information for process improvement is generated in real time. This reduces the error rate while increasing efficiency. In addition, the use of electronic shelf labels instead of paper not only saves costs but also CO2 for an efficient and sustainable future.

## Pick-By/Put-to-light ePaper

During the picking process, the LED of the e-paper label lights up at the corresponding material storage location and indicates to the picker which material needs to be picked. The removal is acknowledged by a scan and the LED switches off. Errors in the picking process are displayed directly during the acknowledgement and can thus be rectified immediately.

### Advantages

- Reduced error rate
- Cost reduction through increased process speed (reduced search times)
- Paper order slips become superfluous
- Complete integration with existing systems easy to implement
- No complex wiring necessary
- Eye-catching LED directly on the e-paper label



## Digital consignment note

E-paper labels with e-ink displays can also be used at mobile locations thanks to battery operation and radio technology. The digital consignment note accompanies a transport trolley through the various stations in the production chain. Information about the contents of the trolley can be updated in real time anywhere in the factory.

### Advantages

- Flexibility and mobility in the Process illustrations
- Real-time information processing
- Ultra low power design
- Greater sustainability through paperless Processes
- Error reduction in the process

## e-Kanban

By acknowledging the removal of material directly on the e-Paper label, ekko adjusts and transmits the stock quantity accordingly. Set threshold values trigger the replenishment process. In parallel, a replenishment can also be triggered by button or even by scale.

### Advantages

- Cost and time savings through automa-automated (ordering) processes
- Controlled material call-offs
- Higher quality of the manufactured products
- For small and large load carriers



## Shelf labelling

In intralogistics 4.0, processes are digitalised and thus also paperless. The areas of application are diverse - on small load carriers in the flow rack, on large load carriers on the storage area or on mobile transport trolleys. The content of the storage location, additional information as well as QR and barcodes are displayed on the ESLs in any layout, depending on the place of use.

### Advantages

- Eliminate cost and time saving manual work (writing, printing and attaching paper labels)
- Clear legibility of the e-paper labels through e-Ink technology
- Ultra low power design
- Central administration of the label contents
- Fully automatable through connection to the ERP system

## Data Hub/Ekko Analytics

Many machines and systems generate data and have their own screens. With the ekko software, all machines & systems can be connected to make the relevant data available in aggregated form at the right time and in the right place. Processes can be evaluated and optimised to save costs and time in the long term by increasing efficiency.

## Warehouse Management

ekko integrates as a subsystem into existing WMS/ERP solutions such as SAP, but can also be used as a stand-alone solution.



# Applications



## RETAIL

The digitalisation of areas such as price adjustment, item labelling, inventory management or logistics saves time and money in retail in the long run. At the same time, ESL conserves resources by using less paper. In addition, ESL and digital signage improve the customer's shopping experience.



## INDUSTRY

Processes in industry and logistics have to become faster and safer with constantly increasing work volumes. With ESL, entire work areas such as inventory management, order picking, restock processes or last mile management are optimised or even automated.



## HOTEL INDUSTRY & GASTRONOMY

In hotels, ESL and Digital Signage are used as interactive information terminals, check-in assistants or to mark menus, events or tourist highlights for guests. In gastronomy, ESL not only enables flexible labelling of menus or buffets, but also automated reservations.



## FACILITY MANAGEMENT

Flexible room signage is enormously important for modern workplaces and concepts such as shared desk spaces. Digital displays connected to existing calendar systems show current occupancies in real time and can be quickly adjusted digitally via software or app as well as manually.



## TOURISM & PUBLIC SPACES

At airports, train stations, bus stops and public places, up-to-date, quickly visible and above all clear signage is crucial. E-ink displays are ideally suited for this purpose, as they promise dynamic information with optimal readability. With touch function, they are also used in various languages as digital assistants in museums or offices.

## AUTOMOTIVE INDUSTRY

In the motor vehicle and automotive industry, dynamic and flexible price labelling is crucial. Especially used cars need competitive price management due to the constant competition with online platforms



# References

## MISTER SPEX

„The solutions from e-shelf-labels fit very well with Mister Spex. We have found exactly the puzzle piece for our stores that we were looking for.“



## FAHRRAD XXL



„With e-shelf-labels, we have gained a competent partner for digitalisation in our company. The dedicated team offers good concepts for the requirements we set, which contributes significantly to the successful implementation. We appreciate the excellent support in our projects and look forward to further cooperation.“

## WINKLERSWURST

„The competent advice from e-shelf-labels helped us with the selection of sign sizes and the equipment of the individual labels and we were able to find the right signs for our shelves and the fresh food counter. Being able to draw on existing experience is a great advantage and saves time and money. We would choose the services of e-shelf-labels again.“



## WOHLLEBENSSPORTS



„e-shelf-labels offers good customer service, the communication with sales and technical support was and is always very good. The advice was also very good throughout. This gave us some food for thought in terms of how to proceed. Overall, we would choose the services of e-shelf-labels again.“

## OSTSEE CAMPINGPARTNER

„Instead of two people spending a week updating the labels, now one person does it within a day and a half. We would choose e-shelf-labels again and have already passed on recommendations to other retailers.“



## MORE REFERENCES




A brand of



## Smart. Digital. Efficient.

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