

DIGITAL + ANALOG
PASSENGER INFORMATION
SYSTEMS



FDITION 4.0

Dynamic Systems for a Smarter Mobility

ST\_VITRINEN TRAIITMANN



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#### **PRODUKTHIGHLIGHTS**



#### Digital and Analog - Perfectly Combined

Our high-quality components guarantee a great lifespan and reliable long-termin use of our Mobility products. Our digital monitor systems work perfectly 24 hours a day, even in adverse weather and environmental conditions. Numerous installations in demanding locations prove this, e.g. above 200 meters in the Alps or on the first coastline on the North and Baltic coasts.

A revision-friendly design of all systems ensures that every single component is accessible and can be serviced regularly with little effort. Stable doors in the base areas, hinged front elements and swiveling monitor suspensions inside the system allow for quick access even in the smallest of spaces. In the very rare instance of one element failing, it can be dismantled individually in a very short time and replaced with a new element immediately.

The entire frame construction is designed for maximum security. All statically relevant components made of steel or aluminum are manufactured in compliance with the requirements of DIN EN 1090 and guarantee great stability for all possible load cases. Glazing with laminated safety glass (VSG) reduces the risk of damage to people if the glass breaks. Security locks and all-round gear locks lock the housing safely and protect against vandalism and unauthorized access.

#### **Optional Extensions**



TOUCH-



FREE CHOICE OF COLORS

CAMERA

(USB / IP)

**SPEAKER** 

MICROPHONE



LIGHTING-CONTROL



WLAN-MODULE



3G/4G/5G MODULE



NEARFIELD-COMMUNICATION



DEFIBRILLATOR



ANTI-GRAFFIT



ANTI-FINGERPRINT



 $_4$ 

#### INTRODUCTION + PRODUCT OVERVIEW



#### Dear Customers,

In this Mobility catalog, we present our product range for passenger information for the entire area of public transportation, including railways and airpoirts. This catalog contains a wide range of choices between our classic, analog poster systems, which we have been successfully producting and using for more than 50 years, and our modern, centrally controllable digital information systems.

Passengers are targeted directly with exciting, moving images and information that is updated in a matter of seconds. Robust devices have been developed especially for

use in the outdoor area and function without problems under difficult light and temperature conditions and can also be designed for train speeds of up to 300 km/h. Impress your passengers with skilfully arranged content and continuously updated, dynamic information, for example on car rows, schedule changes or even malfunctions in driving operations. Barrier-free control elements are also part of our product range, as are highly vandalism-proof constructions, variable design options and a very extensive range of accessory options for additional

benefits, safety and comfort.

We look forward to create your vision of individual design and function requirements combined in a product!

Yours truly, ST-Vitrinen-Team



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TOTEM
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FREESTANDING
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WALLMOUNTING
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#### Our Promise of Performance

As a manufacturer of showcases, totems and digital signage systems, we have been successfully operating on the market for over five decades. Individual custom-made products are part of day-to-day business. Research and development are an integral part of our product management, so that our customers always benefit from an optimal product selection and component composition. Thanks to our in-house production and cooperation with our partner TK-Surface who specializes in coating and surface technology, we are able to respond quickly to every customer request.

Our experience and know-how from 50 years of company history

guarantee professional planning and production. However, we do not only offer our passenger information systems as pure "hardware". You can also count on our support for planning and commissioning. In the planning phase, we carefully record your goals and then develop a concept tailored to your requirements. This can be different for commercial customers than for a municipal customer, for instance.

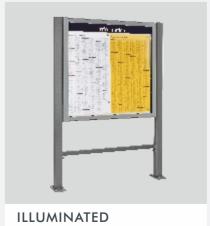
The assembly of free-standing totems or wall systems is part of our range of services. In coordination with your architects, planning offices or building owners, we plan the entire assembly process, take care of delivery times and dates, monitor the

external partners and accompany your project until final completion. Just talk to us about your individual project.

Of course, with our ST information systems, you always get a solution that meets our own highest demands on technology and design. Always developed and produced in-house in Bielefeld, ST-Vitrinen Trautmann is guaranteed "Made in Germany".



BACKLIT SHOWCASE Page 20



SHOWCASE Page 22



SOFTWARE + PLAYER-PC Page 24

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## DIGITAL | MONITOR TOTEM - BARRIER FREE





#### BARRIER FREE MONITOR INFORMATION TOTEM WITH VARIABLY USABLE BACKSIDE

The totem's information area is lowered totem can be provided with a poster other statically created information.

to guarantee easy access for small people display with LED backlighting to give your and peel in wheelchairs. The back of the passengers timetables, wagon rows or

MODEL	49 LB 111	49 LB 112	49 LB 113	55 LB 111	55 LB 112	55 LB113
Panel	49 inch LCD	49 inch LCD	49 inch LCD	55 inch LCD	55 inch LCD	55 inch LCD
Resolution	1920 × 1080 pixels					
Visible Dimensions W×H	1079 × 609 mm	1079 × 609 mm	1079 × 609 mm	1210 × 681 mm	1210 × 681 mm	1210 × 681 mm
Brightness	2500 nit					
Temperature Range	-33 to +40 °C					
Conditioning	Air-air heat exchanger, filterless					
Glazing	VSG 9,14 mm anti-glare with UV- and IR-Protection					
Backside	Closed aluminum plate	2. monitor, data like front side	LED lighting plate for poster advertising	Closed aluminum plate	2. monitor, data like front side	LED lighting plate for poster advertising
Dimensions W×H×D [mm]	1329 × 2000 × 195	1329 × 2000 × 200	1329 × 2000 × 200	1390 × 2000 × 195	1390 × 2000 × 200	1390 × 2000 × 200

#### **KEY FACTS**

- Barrier-free operating concept with multi-touch function
- Information totem with one or two monitors
- Vandalism proof construction
- Brilliant highbright monitors with brightness control
- Optional billboard with LED backlighting on the backside

#### **BACKS**



## DIGITAL | MONITOR TOTEM





#### MONITOR-INFORMATION TOTEM WITH VARIABLY USABLE BACKSIDE

The back of the monitor totem is closed monitor can be placed there optionally. A information permanently can also be

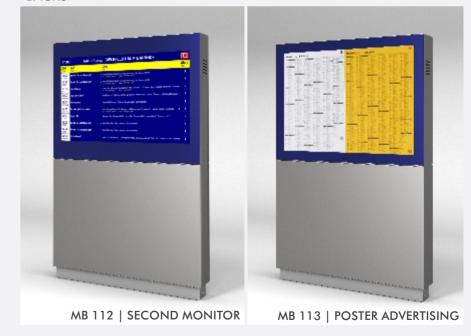
with a flat aluminum plate in the housing billboard with LED backlighting, e.g. to chosen. color in its standard iteration. A second present timetables or other static

MODELL	49 LR 111	49 LR 112	49 LR 113	55 LR 111	55 LR 112	55 LR 113
Panel	49 inch LCD	49 inch LCD	49 inch LCD	55 inch LCD	55 inch LCD	55 inch LCD
Resolution	1920 × 1080 pixels					
Viewable Dimensions W×H	1079 × 609 mm	1079 × 609 mm	1079 × 609 mm	1210 × 681 mm	1210 × 681 mm	1210 × 681 mm
Brightness	2500 nit					
Temperature Range	-33 to +40 °C					
Conditioning	Air-air heat exchanger, filterless					
Glazing	VSG 9,14 mm anti-glare with UV- and IR-Protection					
Backside	Closed aluminum plate	2. monitor, data like front side	LED lighting plate for poster advertising	Closed aluminum plate	2. monitor, data like front side	LED lighting plate for poster advertising
Dimensions W×H×D [mm]	1329 × 2000 × 195	1329 × 2000 × 200	1329 × 2000 × 200	1390 × 2000 × 195	1390 × 2000 × 200	1390 × 2000 × 200

#### **KEY FACTS**

- Information totem with one or two monitors
- Vandalism proof construction
- Description Brilliant highbright monitors with brightness control
- Optional billboard with LED backlighting on the backside

#### **BACKS**



## DIGITAL | MONITOR FREESTANDING





#### FREESTANDING INFORMATION SYSTEM OPTIONALLY WITH TWO-SIDED MONITOR

integrated on the back of the freestanding version has an aluminum plate on the inches can be used. information system to enable it being back instead. Due to the variable basic

A second monitor can optionally be used from both sides. The standard construciton, monitors from 32 to 65

MODEL	32 LR 121	32 LR 122	55 LR 121	55 LR 122	65 LR 121	65 LR 122
Panel	32 inch LCD	32 inch LCD	55 inch LCD	55 inch LCD	65 inch LCD	65 inch LCD
Resolution	1920 × 1080 pixels					
Visible Dimensions W×H	701 × 396 mm	701 × 396 mm	1210 × 681 mm	1210 × 681 mm	1433 × 808 mm	1433 × 808 mm
Brightness	2500 nit					
Temperature Range	-33 to +40 °C	-33 to +40 °C	-33 to+40 °C	-33 to +40 °C	-33 to +40 °C	-33 to +40 °C
Conditioning	Cooling and heating system					
Glazing	VSG 9,14 mm anti-glare with UV- and IR-Protection	VSG 9,14 mm anti-glare with UV- and IR-Prottection				
Backside	Closed aluminum plate	2. Monitor, data like front side	Closed aluminum plate	2. Monitor, Data like front side	Closed aluminum plate	2. Monitor, data like front side
Dimensions W×H×D [mm]	880 × 1900 × 230	880 × 1900 × 360	1390 × 2000 × 230	1390 × 2000 × 360	1613 × 2000 × 230	1613 × 2000 × 360

#### **KEY FACTS**

Freestanding information system with either one or two monitors

Vandalism proof construction

Description of the property of lighting control

A wide monitor selection in sizes from 32 to 65 inches

#### **BACK**



## DIGITAL | MONITOR FREESTANDING





#### FREESTANDING INFORMATION MONITOR IN PORTRAIT FORMAT

format is required, this solution offers two barrier-free operating concept with construction.

different monitor sizes in said format. This lowerable information content and

For applications in which a portrait product is particularly suitable for a operating elements, as well as a leg

### MODEL

Panel

Resolution

Monitor Viewing Dimension W×H

Brightness

Temperature Range

Conditioning

Glazing

Backside

Dimensions  $W \times H \times D$ 

#### 49 PR 121 55 PR 121

49 inch LCD	55 inch LCD
1080 × 1920 pixels	1080 × 1920 pixels
609 × 1079 mm	681 × 1210 mm
2500 nit	2500 nit
-33 to +40 °C	-33 to +40 °C
Ventilation and heating system	Ventilation and heating system
VSG 9,14 mm - anti-glare UV- and IR-Protection	VSG 9,14 mm - anti-glare UV- and IR-Protection
Closed aluminum plate	Closed aluminum plate
790 × 2000 × 220 mm	861 × 2000 × 220 mm

#### **KEY FACTS**

- O Monitor in portrait format
- Vandalism proof construction
- Description Brilliant highbright monitors with lighting control
- Description Barrier-free operation concept with lowerable contents and leg construction



## DIGITAL | WALL MONITOR





#### MONITOR FOR WALL MOUNTING OR NICHES

also be freely suspended on a supporting corresponding niche is possible as well. with ventilation slots. structure and inclined to the viewer if The necessary ventilation is then carried

The monitor model for wall mounting can desired. A flush installation in a out via a narrow, all-round frame profile

MODEL	49 LR 131	55 PR 131
Panel	49 inch LCD	55 inch LCD
Resolution	1920 × 1080 pixels	1920 × 1080 pixels
Monitor Viewing Dimensions $W \times H$	1079 × 609 mm	1210 × 681mm
Brightness	2500 nit	2500 nit
Temperature Range	-33 to +40 °C	-33 to +40 °C
Conditioning	Air-air heat exchanger, filterless	Air-air heat exchanger, filterless
Glazing	VSG 9,14 mm - anti-glare UV- and IR-Protection	VSG 9,14 mm - anti-glare UV- and IR-Protection
Backside	Closed aluminum plate	Closed aluminum plate
Dimensions W $\times$ H $\times$ D	1329 × 981× 195 mm	1390 × 1055 × 195 mm

#### **KEY FACTS**

Wall-mounting for free-hangig variant possible on a carrier structure

Optional as flush installation into a wall recess with a narrow, circumferential profile as a ventilation frame

Description Brilliant highbright monitors with brightness control

#### **VARIANT FOR NICHES**



### DIGITAL | WAITING HALL INFORMATION SYSTEM





#### MONITOR COMBINATION WITH BACKLIT BILLBOARD

offers an innovative combination of shows dynamically updated timetable spacew for static information and can be digital display technology and classic information. A timetable notice and backlitif desired.

Our new waiting hall information system timetable notices. The 21.5-inch monitor another name field provide additional

#### 21 LR 101 MODEL 21,5 inch LCD 1920 × 1080 pixels Resolution Monitor Viewing Dimensions W×H 476 × 268 mm 1500 nit Brightness -33 to +40 °C Temperature Range Conditioning Cooling system, filterless Glazing VSG 7 mm, anti-glare Closed aluminum plate Backside Dimensions $W \times H \times D$ 1350 × 1022 × 53 mm

#### **KEY FACTS**

- 21.5 inch monitor for dynamically updatable passenger information
- Drilliant highbright monitor, optionally with brightness control
- Additionally with poster area and labeling field, both optionally with LED backlighting
- Ocst-effective solution for comprehensive, digital passenger information







#### FRAMES INFORMATION TOTEM

timetable is backlit with LED lights to reduced for people with disabilities.

The front glass of this information totem save energy. A barrier-free timetable is For tactile detection according to TSI and is ceramic-printed and eclosed in guaranteed by a notice directly behind PRM, a filling element made of glass interchangeable glass strips. The the protective screen, as glaring is and stainless steel is used as a bottom

MODEL	A0 SQUARE	A0 CROSS	A0 PORTRAIT		
Dimensions - 1-sided W×H × D	1375 × 1370 × 148	1375 × 1120 × 148	775 × 1120 × 148		
Dimensions - 2-sided W×H × D	1375 × 1370 × 211	1375 × 1120 × 211	775 × 1120 × 211		
Side Stand	L = 2270 mm, with securing elmement and filling element made of glass.	L = 2020 mm, with securing element and filling element made of glass.	L=2020 mm, with securing element and filling element made of glass.		
Construction	Hollow chamber profile system made of aluminum, color coated in RAL 9006 - Anti-Graffiti.				
Glazing	ESG - safety glass 5.0 mm; ceramic printed and framed in the ST-glazing system				
Opening	Folding wing with concealed hinges and gas pressure openers with safety lock.				
Closure	Comfort closure with DB 3-point snap lock.				
Lighting	Linear LED lighting with changeover switch. Full backlighting of the opal poster carrier glass.				
Accessories	Poster carrier glass encased in the profile system with integrated poster clamping technologyfor a timetable notice directly behind the protective screen. Filling element made of glass with stainless steel cover according to TSI and PRM.				
Side Stand  Aluminum square profile 100 x 100 mm with steel profile core according to static requirements and distance axis dimension of 1500 mm, powder-coated in accordance with RAL 9007 anti-graffiti.					

#### **KEY FACTS**

- Design-oriented information totem with all-glass look
- Darrier-free billboard according to TSI and PRM shock resistance  $2 \times Ik10$  (certified)
- Dilliant, energy-saving LED backlighting
- Invisible comfort lock in the lower area with a DB-3 triangular snap lock

#### WING OPENING







#### INFORMATION TOTEM - DEFAULT + VANDALISM PROOF

The timetable is posted on an inclined angle of 20° optimize the readability. An glass structure. The certified shock magnetic rear wall which is printed with orientation bracket guarantees tactile resistances of both versions corresponds an orthogonal grid to align the plans. detection according to TSI and PRM. The to  $2 \times lk10$ . LED lights with front optics and a beam vandalism proof version has a sturdier

MODEL	A0 SQUARE	A0 CROSS	A0 PORTRAIT			
Dimensions - 1-sided W×H × D	1375 × 1370 × 100	1375 × 1120 × 100	775 × 1120 × 100			
Dimensions - 1-sided W×H × D	1375 × 1370 × 210	1375 × 1120 × 210	775 × 1120 × 210			
Side Stand	L = 2270 mm, with securing element and orientation frame.	L = 2020 mm, with securing element and orientation frame.	L = 2020 mm, with securing element and orientation frame.			
Construction	Hollow chamber profile system made of aluminum, color coated in RAL 9006 - anti-graffiti.					
Glazing, Default	ESG - Safety glass 5.0 mmm; enclosed in ST-glazing system.					
Glazing, Vandalism Proof	VSG - Safety glass made of 2 TVG glass panes with a sturdy intermediate layer in the space; enclosed in the ST-glazing system.					
Opening	Folding wing with concealed hinges and gas pressure openers with safety lock.					
Closure	Comfort closure with DB 3-point snap lock. Niche variant with key entry from the front.					
Lighting	Energy-saving LED lighting with changeover switch and focusing optics.					
Accessories	Sloping plate with orthogonal point grid. Opal aluminum bezel with text "information".  Orientation frame for tactile recognition according to TSI and PRM.					
Side Stand	Aluminum square profile 100 x 100 mm with steel profile core according to static requirements and distance adapter profile for an axis dimension of 1500 mm, powder-coated in accordance with RAL 9007 anti-graffiti.					

#### **KEY FACTS**

- Vandalism proof variant with sturdy glazing
- Barrier free poster notice according to TSI und PRM
- Shock resistance certified according to 2 × Ik10
- Energy-saving LED lighting with focusing optics
- Invisible comfort lock in the lower area with a DB 3- triangular snap lock

#### WING OPENING



#### CONTENT MANAGEMENT SOFTWARE + HARDWARE



#### **CONTROL YOUR SCREEN**

Our further developed, user-friendly content management software is designed to operate our e.VITRUM outdoor and indoor series. The software enables the user to centrally control his digital content while monitoring it precisely. This allows for full contorl of all networked monitors at all times and coordinattes the presentation of your individually compiled information or advertising content.



#### **SOFTWARE KEY FACTS**

#### Layout-Freedom

With the software you can freely design your screen layout according to your wishes. You are not bound to any set layouts or templates. Nevertheless, you have a large selection of predefined, freely usable screen layouts available.

Already created layouts can be saved and reused or edited at any time if necessary. The overall layout of the display area can be divided into any number of segments. All content can be displayed or played independently in free window areas.

For the individual layout segments, you can freely determine whether you want to display a website, play videos or music or if necessary display interactive elements.

There are no limits to your creativity and your ideas!

#### Intuitive Operation

A great advantage of the software is the simple and intuitive user interface. If you are familiar with other windows programs, you will quickly familiarzie yourself with it and use the software efficiently. A quick familiarization guarantees immediate results!

A quick and easy familiaziation guarantees immediate results!

#### Format Variety

All common media formats can be transferred to your playlists without prior conversion. Websites, flash files and PowerPoint presentations (no license required) can be displayed as well as all popular image and video file formats.

Immediately playable content, without time-consuming format conversion!

#### Easy Maintenance and Installation

The installation of the software on a client PC usually takes no more than 30 minutes. An easy-to-use installation routine supports you in integrating the software into your network.

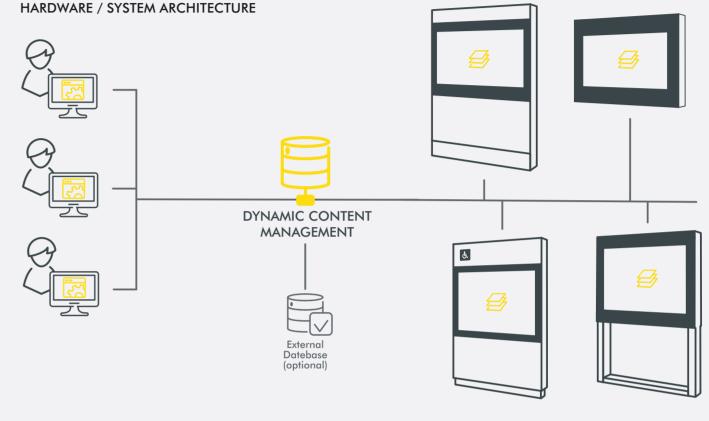
Upcoming updates and software upgrades can be carried out easily and securely over the network.

Secure system integration and easy software updates!

#### Protocol Function

All playout and status information is logged and saved for each point of visualization so that the data can be used, for instance, as a basis for billing or service operations.

Control and documentation are possible at any time!



The Content-Management-System runs as software on a notebook or PC. This means that the content is managed and prepared centrally. The data structure can be expanded as required, organized in folders and sub-groups and arranged as desired.

A **Server** is responsible for data storage and exchange. It sends the current playback content to the player PCs at configurable intervals.

The Player-PCs or Media-Player are integrated into the monitor totem or the monitor housing and show the respective content on the display.

#### PLAYER-PC

Dimensions L $\times$ W $\times$ H

CPU

GPU

Network Technology

SSD

Storage Connectors 117 × 112 × 36 mm

Quad-Core i5 / to 3,80 GHz

Intel Iris Plus Graphics 655

Gigabit LAN | 802.11ac WLAN | v5.0 Bluetooth

500 GB M.2

8GB DDR4 SO-DIMM

4 × USB 3.1 1 × HDMI 2.0

 $1 \times Thunderbolt 3 supports$ 

USB 3.1 Gen.2 und DisplayPort 1.2



 $^{24}$ 

### **PROJECTS & REFERENCES**



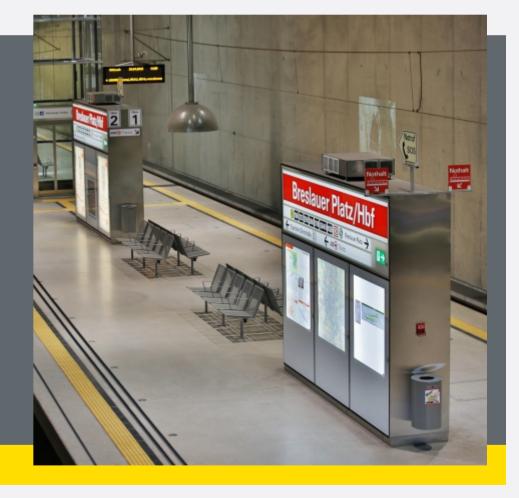








PROJECTS & REFERENCES



### **PROJECTS & REFERENCES**





An optional angle adjustment unit allows an appropriate installation of up to 15°.

The housing is opened upwards using the hinged sash. To easily access the electrical components, the integrated monitor can be swiveled upwards.









## PROJECTS & REFERENCES







#### **PROJECTS & REFERENCES**

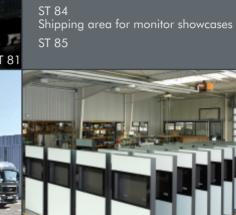












ST 82 Profile warehouse II in the logistics







## OUR PROFILE

We have been planning, developing and manufacturing showcases and clock systems since 1969. Our products are made for an extremely wide range of applications in indoor and outdoor areas.

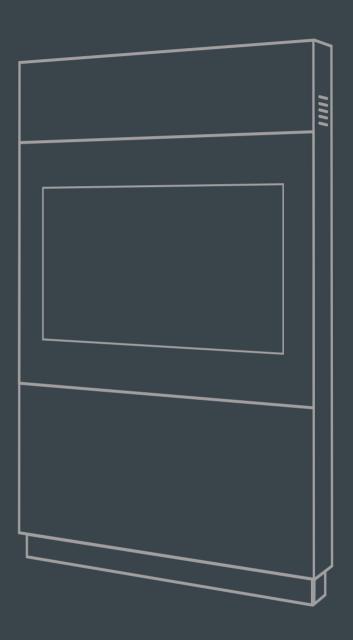
Our innovative information systems are developed with multiple partners, architects and planners in order to then be implemented with our team of metal workers, carpenters, locksmiths, electronics engineers and glaziers. It is our aim to always provide our products with the highest quality, safety and usability, as well as to give them our unique design.

ST 86 Head office in Bielefeld Left: Administration & production halls Right: Logistics center & e.VITRUM assembly

ST 87 Facility II - logistics center







### ST-MOBILITY | EDITION 4.0



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