PMI® operator terminals

- Professional diagnostics and visualisation
- Operator and graphics devices “Made in Germany”
Pilz is your solution supplier for all automation tasks. Including standard control functions. Pilz developments protect man, machine and the environment.

Pilz has a tradition as a family-run company stretching back over 60 years. Real proximity to customers is visible in all areas, instilling confidence through individual consultation, total flexibility and reliable service. Worldwide, round the clock, in 31 subsidiaries and branches, as well as 15 sales partners on every continent.

More than 1,700 staff, each one of them an ambassador for safety, make sure that your company’s most valuable asset – your staff – can work safely and free from injury.

Further information: www.pilz.com + Webcode 0837
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Automation solutions from Pilz – at home in every industry.
Professional diagnostics and visualisation.
Operator terminals PMI (Pilz Human Machine Interface), are used to operate and monitor your technical processes. From a simple diagnostic unit with touchscreen/key functions to an operator terminal for demanding applications, Pilz offers you a wide range of devices. This has proven itself for many years in the most varied applications, often as a complete solution with our safe automation solutions. Our compact operator terminals offer the highest level of functionality and can also be integrated into your production and automation system.

Good visualisation and diagnostics also mean shorter downtimes and therefore increased cost effectiveness. When an error occurs, diagnostics on the machinery play a special role. As a plant/machine operator you can use the PMI operator terminals in conjunction with Pilz control systems to create a system that enables rapid troubleshooting when production faults occur. As a complete solution for diagnostics the PMI operator terminals offer you the full diagnostic functionality of PVIS.

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An overview of our services

Business activities

COMPONENTS

Sensor technology
- Position monitoring devices
- Safety switches
- Safety gate systems
- Light beam devices
- Safe camera systems

Control technology
- Line inspection devices
- Brake control devices
- Monitoring relays
- Safety relays
- Configurable control systems
- Compact programmable control systems
- Modular programmable control systems
- Decentralised periphery

Networks
- Safe fieldbus systems
- Ethernet systems
- Wireless systems

Drive technology
- Motion control systems
- Servo amplifiers
- Motors

Operator and visualisation systems
- Control and signal devices
- Operator terminals

Software
- Product and system tools
- Application software
- Product-independent tools

SYSTEMS

Automation system PSS 4000
- Control systems
- Real-time Ethernet
- Software platform

SERVICES

Consulting and engineering
- Risk Assessment
- Safety Concept
- Safety Design
- System Implementation
- Safety Validation
- CE Marking
- International Compliance Services
- Plant Assessment
- Inspection of ESPE

Training
- Product-neutral seminars
- Product courses
Solution supplier for safety and standard

As market and technology leader, Pilz offers a comprehensive portfolio of products, systems and solutions for use across a range of industries. Safety or standard, plant or machine, single product or total solution – Pilz has the right answer, guaranteed. Economical, technical, personal and ecological safety are a matter of course, just as much as overall, flexible solutions.

The wide-ranging sensor technology portfolio provides the right sensor for each application. In conjunction with safe control technology, the result is a safe, economical, approved and complete solution.

Control technology enables numerous application options, including monitoring of electrical and functional safety, through to complete machine control: from a simple machine through to a distributed plant with a wide range of standard and safety functions.

Networks are clear and powerful due to compatible communication systems and network components. Diverse technologies enable a variety of solution approaches, including wireless, fieldbus and Ethernet systems.

Drive technology ranges from drive-integrated safety functions to safe logic functions, through to connection of visualisation, sensor and actuator technology for every system environment.

Operator and visualisation systems enable short reaction times through control and signal devices, as well as rapid diagnostics via visualisation systems. As the ideal supplement for other Pilz products, your plant is completed reliably and in compliance with the standards.

Whatever the task, our software has the right tool. This includes application software, such as function blocks, product and system tools, as well as product-independent tools. The focus is on intuitive operation.

The automation system PSS 4000 for standard and safety is ideal for automation solutions in every industry. Interaction between the most diverse components, the software platform PAS4000 and the real-time Ethernet SafetyNET p are the system’s distinguishing features.

Our services include consulting, technical implementation and training in the field of machinery safety. Our experts will guide you through the whole machine lifecycle, through to CE certification.
The PMI operator terminals (Pilz Human Machine Interface) offer a sophisticated diagnostics and visualisation concept that is adapted to the requirements of machinery and plants in increasingly complex production processes. Powerful 1 GHz RISC processors guarantee speedy performance even with complex applications. You have the choice between a large number of display sizes. These offer you the flexibility that you need for your projects.

**Hardware**

The devices are developed and manufactured in-house in Germany under the same strict quality requirements as our proven safe automation technology.

So you receive reliable, high-quality devices plus competent advice and customer care. A selection of display sizes and feature options are available, providing the flexibility you need for your work:

- Visualisation for compact projects – PMI 509 with 3.5" display and PMI 515 with 5.7" display
- High level of visualisation within a small area – PMI 516 with 6.5" display
- With widescreen for high resolution – PMI 518 with 7" display
- Visualisation that’s easy to read – PMI 526 with 10.4" display
- The solution for large plants – PMI 531 with 12.1" display
- The solution for complex plants – PMI 538 with 15.0" display

Maximum flexibility – the PMI operator terminals in 7 display sizes.
All units are specially designed for use in a rugged industrial environment:

- Heat-stable due to low-power RISC processor
- Insensitive to vibration due to soldered memory and processors
- Insensitive to dust due to ventilation-free technology
- Front is protected against dust and sprayed water (IP65)

**Diagnostics**

PMI offers all the attractive diagnostic functionalities of PVIS (see page 14). Diagnostics on PSS programmable safety and control systems, automation system PSS 4000, the safe bus system SafetyBUS p, SafetyNET p, the configurable control systems PNOZmulti and Pilz Motion Control (PMC).

**Visualisation**

PMI can be applied:

- As a flexible complete solution for the visualisation of PSS, PSS 4000, SafetyBUS p, SafetyNET p, PMC and PNOZmulti
- In combination with every common graphics software: simple configuration, implementation and application
- With any Windows® CE-compatible software, specially with numerous applications for Win CE 6 (ARM)
Product group PMI operator terminals

The complete solution for diagnostics

When you use the PMI operator terminals, you benefit from the products' high performance and from quality that was developed and manufactured in Germany. The existing expertise at Pilz means that specific adaptations are easy to make. We offer you competent advice and customer care.

Diagnostics
PMI offers all the attractive diagnostic functionalities of PVIS (see page 14).

- Diagnostics on PSS programmable safety and control systems, automation system PSS 4000, the safe bus system SafetyBUS p, SafetyNET p, the configurable control systems PNOZmulti and Pilz Motion Control (PMC)
- Simultaneous diagnostics on several PSS programmable safety and control systems, SafetyBUS p CPUs and PNOZmulti units, including a combination of these units
- Diagnostics can be displayed on multiple graphics devices
- Clear presentation and simple display-based operation

Error messages from the control systems PNOZmulti and PSS, the safe bus systems SafetyBUS p and SafetyNET p or even Motion Control PMC are shown along with practical suggestions for how to rectify the fault. As a complete solution for diagnostics the PMI operator terminals offer you the full diagnostic functionality of PVIS. As a plant operator, no programming skills are required. The PMI gives you tips on how to quickly return your machinery to operation. No need for time-consuming troubleshooting, the right solution is ready and waiting on the machine. So you save around 50% of the time required for the fault recovery!
The complete solution for diagnostics

Product group PMI operator terminals

Depending on the software used, PMI performs visualisation and control tasks, e.g. for the programmable control systems PSS, the automation system PSS 4000, the safe bus system SafetyBUS p and SafetyNET p.

Visualisation
PMI can be applied

- As a flexible complete solution for the visualisation of PSS, PSS 4000, SafetyBUS p, SafetyNET p, Pilz Motion Control (PMC) and PNOZmulti
- In combination with every common graphics software, e.g. zenon from COPA-DATA

The PMI masters all common visualisation tasks: simple configuration, implementation and application. Thanks to the use of standardised interfaces all common makes of programmable logic controller on the market can be connected to a PMI such as control systems from Pilz, Siemens, Allen Bradley, Telemechanique, HITACHI, OMRON and Mitsubishi and many more besides

Simple software installation
The operator terminals PMI are ready for the installation of both standard graphics software and customised software. In principle, any software created for Windows® CE.net and Intel® XScale processor can be operated on PMI (SDK, System Developer Kit is included).  

Installation has been tested for a selection of graphics software programs:

- zenon from COPA-DATA
- Web Studio from InduSoft
- Movicon from Progea

1) Please refer to the PMI 5 operating manual for further features
2) Please purchase from the software manufacturer

Keep up-to-date on operator terminals PMI:

Webcode 0685

Online information at www.pilz.com
Features Diagnostic concept PVIS

Diagnostics made simple – with the diagnostic concept PVIS

Plant and machinery must be productive. As efficiently and economically as possible, and without interruption. It’s not until the machine suffers an unscheduled stop that you recognise the value of good, user-friendly diagnostics. A sophisticated concept developed from practice is a prerequisite. At Pilz we call it PVIS for short. It’s a universal diagnostic solution for small machines to large plants.

Two recognised factors were key for development. Machine manufacturers require programming to be simple, involving minimum effort. Operators, on the other hand, need clear, unambiguous instructions to enable them to rectify faults efficiently. PVIS satisfies both sides.

Configuration features
- Diagnostic projects are created with just a few clicks, using familiar programming software (PSS WIN-PRO or PNOZmulti Configurator).
- Pre-defined plain text messages and remedy messages are available for devices and blocks. Texts can be copied, adapted or created from new.
- All pre-defined texts are stored in multiple languages.
- Diagnostic messages can be extended based on bit and word information from the control systems.

Operational features
- Clear information on the fault that has occurred: The operator is able to act quickly in the event of a fault.
- Targeted support for troubleshooting and fault recovery: This increases your ability to act in the case of a malfunction and thus your productivity. The remedy messages for the safety devices are already pre-defined and stored in the tools.
- Analysis included: For later analysis, PVIS stores every event with details of incoming and outgoing times in an "Event Log" ring memory.

PVIS event message components
- Plain text message for the event
- Remedy messages for each event (up to eight actions)
- Text-based location information on equipment identifier, scope and responsibility
- Messages are prioritised – the triggering event is always displayed first

The texts are stored in the relevant project. For further details please refer to our System Descriptions!
Features Diagnostic concept PVIS

Diagnostics made simple – with the diagnostic concept PVIS®

Online information at www.pilz.com

For control systems PNOZmulti and PSS, the automation system PSS 4000, the safe bus system SafetyBUS p and SafetyNET p, the safe camera system SafetyEYE and the servo amplifier PMCprotego D

Configuration with just a few clicks

First fault detection

Graphical location information

Practical solution proposals – step-by-step

Save time during engineering

Save time during operation

Made in Germany

Keep up-to-date on the diagnostic concept PVIS:

Webcode 5069

Online information at www.pilz.com
Wide range of application options – with the diagnostic solution PVIS

Universal diagnostic concept: from a small machine to a large plant – PVIS suits every application

Variety of potential solutions: fits into any customer topology

Point-to-point connection
One control system, multiple graphics devices
Multiple control systems, multiple graphics devices
Features Diagnostic concept PVIS

PVIS OPC Tools – immediately ready to go

The CD "PVIS OPC Tools" is available for PVIS expanded diagnostics. The CD-ROM contains a collection of programs and components that are required for the PVS expanded diagnostics.

- Order numbers: 261 904

Benefits for machine operators
- Saves time and money with error messages in plain text
- Practical solution proposals help to get production restarted quickly
- Simple to operate, without any knowledge of programming
- Machine-specific diagnostic solution thanks to an intelligent concept

Benefits for machine manufacturers and system integrators
- Use familiar software:
  - PSS WIN-PRO or PNOZmulti Configurator
  - Pre-defined error messages and step-by-step remedy messages for a large number of safety devices
- Save time with simple configuration:
  - just a few clicks in the control system’s software
- Pre-defined messages in multiple languages
- Flexible concept – easy to adapt pre-defined messages and add new messages

PVIS OPC Tools

<table>
<thead>
<tr>
<th>Type</th>
<th>Features</th>
<th>Licences</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVIS OPC Tools</td>
<td>CD-ROM</td>
<td>-</td>
<td>261 904</td>
</tr>
<tr>
<td>PVIS OPC Server for PC</td>
<td>Point-to-point connection, one PVIS OPC Server and one Pilz control system</td>
<td>PtoP, runtime</td>
<td>261 907</td>
</tr>
<tr>
<td></td>
<td>Multiple connection, e.g. one PVIS OPC Server and several control systems as well as additional diagnostic devices</td>
<td>Multiple, runtime</td>
<td>261 908</td>
</tr>
</tbody>
</table>

Keep up-to-date on the diagnostic concept PVIS:

Webcode 5069

Online information at www.pilz.com
Flexible diagnostics – PVIS OPC Tools

PVIS OPC Server and PVIS ActiveX Control for Pilz control systems

The PVIS OPC Tools consist of the PVIS OPC Server, PVIS ActiveX Control and PVIS OPC Configurator. The PVIS OPC Server supplies all the data from the connected control system based on the OPC standard such as the control systems PSS, PNOZmulti or PMC. The messages are displayed in a pre-programmed window in PVIS ActiveX Control format. The display can be incorporated directly into many graphics software packages without any additional programming or can be shown in Internet Explorer.

OPC
OPC stands for openness, productivity, collaboration. It is a standardised software interface, which enables applications from a wide variety of manufacturers to exchange data.

ActiveX Control
An ActiveX Control is a reusable software component, which can be developed for a variety of uses, e.g. for graphical data display.

PVIS OPC Configurator
The PVIS OPC Configurator is used to collect diagnostic data from the PSS WIN-PRO/ PNOZmulti Configurator projects. The data is then transferred from the PVIS OPC Configurator to the operator terminal PMI.
Data access to process data
In addition to its diagnostic functionality the PVIS OPC Server also provides data access to process data in the PSS. Access occurs via a standard OPC Client and is naturally read/write.

PVIS diagnostics and visualisation of multiple control systems
With PVIS OPC Tools it is possible to diagnose several control systems simultaneously – including a combination of PSS and PNOZmulti. The messages can be displayed using several diagnostic devices. Several PVIS ActiveX Controls can access one PVIS OPC Server in the process. Diagnostic devices may be devices from the PMI product range or standard PCs/industrial computers.
PVIS® for the automation system PSS 4000

In the automation system PSS 4000 a PC or an operator terminal PMI obtains the system section OPC Server by installing the PSS 4000 firmware. With the installation of the PSS 4000 firmware, a PC becomes a PSS 4000-operable device from a third-party manufacturer and an operator terminal PMI becomes a PSS 4000-operable device from Pilz.

The following boundary conditions are valid for the OPC Server:

- The OPC Server supports different OPC features for access from OPC Clients
- The OPC Server can be installed on a PC or an operator terminal PMI from Pilz
- An OPC Server can precisely collect the data from a project that was created with PAS4000 and provide this to the OPC Clients
- In every project that is created with PAS4000, there can be exactly one OPC Server
- It is possible to access the OPC Server with more than one Client
- All project-related settings for the OPC Server are made in PAS4000 and transferred to the OPC Server when downloading the project as an OPC device project
In a minimum configuration, the OPC Server will be on the same PC as the OPC Client with the graphics software.

Networking of OPC Server and OPC Clients via Ethernet.
### Operator terminals PMI

<table>
<thead>
<tr>
<th>Type</th>
<th>Display diagonal</th>
<th>Resolution in pixels</th>
<th>Power consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMI 509</td>
<td>3.5&quot;/89 mm</td>
<td>320 x 240 QVGA</td>
<td>2.5 W</td>
</tr>
<tr>
<td>PMI 515</td>
<td>5.7&quot;/147 mm</td>
<td>320 x 240 QVGA</td>
<td>3.3 W</td>
</tr>
<tr>
<td>PMI 516</td>
<td>6.5&quot;/160 mm</td>
<td>640 x 480 VGA</td>
<td>6.5 W</td>
</tr>
<tr>
<td>PMI 518</td>
<td>7&quot;/180 mm widescreen</td>
<td>800 x 480 WVGA</td>
<td>5.8 W</td>
</tr>
<tr>
<td>PMI 526</td>
<td>10.4&quot;/260 mm</td>
<td>800 x 600 SVGA</td>
<td>6.3 W</td>
</tr>
<tr>
<td>PMI 531</td>
<td>12.1&quot;/310 mm</td>
<td>800 x 600 SVGA</td>
<td>8.9 W</td>
</tr>
<tr>
<td>PMI 538</td>
<td>15&quot;/380 mm</td>
<td>1024 x 768 pixels XGA</td>
<td>11.0 W</td>
</tr>
</tbody>
</table>

#### Common features
- Display: Graphic colour TFT, 65536 colours, LED backlight
- Mobile memory: USB stick, SD card
- Processor: RISC 1 GHz, ARM, heat-stable due to low power
- Memory: 256 MByte RAM, 512 MByte Flash
- Operating system: Windows CE 6 Professional
- Character set: Unicode
- Supply voltage: 24 VDC
- Protection type: IP65 front is protected against dust and sprayed water, back IP20
- Real-time clock: Battery-buffered real-time clock
- Environment:
  - Operating temperature: 0 … 50 °C
  - Storage: -25 … +60 °C
  - Climatic suitability: Max. 93 % r.h. at +40 °C
- Graphics software (please order licence separately): PVIS OPC Tools
- User-specific applications and various visualisation software packages can be installed
- Certification: CE, UL/cUL

### PVIS OPC Tools

<table>
<thead>
<tr>
<th>Type</th>
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<tbody>
<tr>
<td>PVIS OPC Tools</td>
<td>CD-ROM</td>
<td>-</td>
<td>261 904</td>
</tr>
<tr>
<td>PVIS OPC Server for PMI</td>
<td>Point-to-point connection, one PVIS OPC Server and one display unit</td>
<td>PtoP, runtime</td>
<td>261 905</td>
</tr>
<tr>
<td></td>
<td>Eightfold connection, e.g. one PVIS OPC Server and seven display units</td>
<td>8con, runtime</td>
<td>261 906</td>
</tr>
<tr>
<td>zenon Operator</td>
<td>Editor for projects up to 1024 tags</td>
<td>zenon Operator Dev 1024</td>
<td>265 010</td>
</tr>
<tr>
<td></td>
<td>Runtime Windows CE for PMI projects up to 1024 tags</td>
<td>zenon Operator RT PMI</td>
<td>265 210</td>
</tr>
</tbody>
</table>
## Technical details PMI operator terminals

<table>
<thead>
<tr>
<th>Dimensions incl. front panel (H x W x D) in mm:</th>
<th>Operation</th>
<th>Interfaces</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>87 x 157 x 40</td>
<td>Keys/touchscreen</td>
<td>1 x Ethernet, 1 x RS232, 1 x USB host, 1 x USB slave, 1 x Audio Out</td>
<td>264 509</td>
</tr>
<tr>
<td>144 x 170 x 40</td>
<td>Analogue resistive touchscreen</td>
<td>1 x Ethernet, 1 x RS232, 1 x USB host, 1 x USB slave, 1 x Audio Out</td>
<td>264 515</td>
</tr>
<tr>
<td>165 x 212 x 62.5</td>
<td>Analogue resistive touchscreen</td>
<td>1 x Ethernet, 1 x RS232, 2 x USB host, 1 x USB slave, 1 x Audio Out</td>
<td>261 516</td>
</tr>
<tr>
<td>160 x 232 x 62.5</td>
<td>Analogue resistive touchscreen</td>
<td>1 x Ethernet, 1 x RS232, 2 x USB host, 1 x USB slave, 1 x Audio Out</td>
<td>264 518</td>
</tr>
<tr>
<td>243 x 317 x 62.5</td>
<td>Analogue resistive touchscreen</td>
<td>1 x Ethernet, 1 x RS232, 2 x USB host, 1 x USB slave, 1 x Audio Out</td>
<td>264 526</td>
</tr>
<tr>
<td>276 x 352 x 63.3</td>
<td>Analogue resistive touchscreen</td>
<td>1 x Ethernet, 1 x RS232, 2 x USB host, 1 x USB slave, 1 x Audio Out</td>
<td>264 531</td>
</tr>
<tr>
<td>332 x 412 x 63.3</td>
<td>Analogue resistive touchscreen</td>
<td>1 x Ethernet, 1 x RS232, 2 x USB host, 1 x USB slave, 1 x Audio Out</td>
<td>264 538</td>
</tr>
</tbody>
</table>

### Connection example for configurable control system PNOZmulti and PMI 509.


1: Audio interface LINE OUT  
2: SD/SDHC card  
3: Ethernet interface (100 BaseTX)  
4: Supply voltage +24 VDC  
5: Serial interface COM 1 (RS232)  
6: USB slave  
7: USB host 1  
8: USB host 2  
9: Functional earth

#### Online information at www.pilz.com

- **Webcode**: 5885
- **PMI accessories**
- **Download**

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Made in Germany

Keep up-to-date on: PMI operator terminals

- **Webcode**: 5582

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Made in Germany

Keep up-to-date on: PMI operator terminals

- **Webcode**: 5885

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In many countries we are represented by sales partners. Please refer to our homepage www.pilz.com for further details or contact our headquarters.
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## Support

Technical support is available from Pilz round the clock.

<table>
<thead>
<tr>
<th>Region</th>
<th>Country</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td>Brazil</td>
<td>+55 11 97569-2804</td>
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<tr>
<td></td>
<td>Mexico</td>
<td>+52 55 5572 1300</td>
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<tr>
<td></td>
<td>USA (toll-free)</td>
<td>+1 877-PILZUSA (745-9872)</td>
</tr>
<tr>
<td>Asia</td>
<td>China</td>
<td>+86 21 60880878-216</td>
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<td></td>
<td>Japan</td>
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You can reach our international hotline on: +49 711 3409-444
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Pilz develops environmentally-friendly products using ecological materials and energy-saving technologies. Offices and production facilities are ecologically designed, environmentally-aware and energy-saving. So Pilz offers sustainability, plus the security of using energy-efficient products and environmentally-friendly solutions.
PASvisu –
The web-based visualisation software

All your automation at a glance!
All your automation at a glance!
**PASvisu – The web-based visualisation software**

Carefree times, beautiful nature and zest for life – this is what we love about holidays in faraway places. What would it be like to be able to apply this feeling to your automation tasks as well?

Your automation projects can be managed using the web-based visualisation software PASvisu for simple configuration and optimum visualisation.

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Pilz is your solution supplier for all automation tasks. Including standard control functions. Pilz developments protect man, machine and the environment.

Pilz has a tradition as a family-run company stretching back over 60 years. Real proximity to customers is visible in all areas, instilling confidence through individual consultation, total flexibility and reliable service. Worldwide, round the clock, in 33 subsidiaries and branches, as well as 21 sales partners on every continent.

More than 2,000 staff, each one of them an ambassador for safety, make sure that your staff – your company’s most valuable asset – can work safely and free from injury.

Further information: www.pilz.com + Webcode: web0837
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Automation solutions from Pilz – at home in every industry.
Pilz automation solutions –
All in One: Safety & Automation

Pilz offers you solutions for complete automation. From sensor technology to control and drive technology – with safety and automation included. On all components and systems, simple commissioning, simple handling and simple diagnostics play an important role!

Profit from flexible automation solutions for small machines or even large, networked plants. Regardless of whether you want to standardise your safety, implement safety and automation in the periphery or are looking for the solution for complete automation.

Pilz solutions are embedded into the relevant system environment – whether a new structure or a retrofit – and open for a variety of interfaces and functionalities.

The perfect combination:

Control technology enables numerous application options, including monitoring of electrical and functional safety, through to complete machine control.
Pilz automation solutions – All in One: Safety & Automation

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The perfect combination:

- Control technology enables numerous application options, including monitoring of electrical and functional safety, through to complete machine control.

In combination with the various control systems, safe sensors and decentralised modules guarantee the efficient use of plant and machinery in compliance with standards. Ready-to-install systems and universally compatible solutions offer high potential savings.

In the area of drive technology, the offer includes drive-integrated safety functions, safe logic functions and the connection of visualisation, sensor and actuator technology.

Your plant or machinery are completed with operator and graphics devices from Pilz.

Design, programming, configuration, commissioning, diagnostics and visualisation can be achieved quickly and simply using Pilz automation software.

Pilz offers scalable solutions to suit each requirement – from sensor technology to control and drive technology.

All in One: Safety & Automation

- Full diagnostic options for reduced machine downtimes
- Open communication for high flexibility
- Innovative software solutions for easy configuration, programming and visualisation
- High scalability for individual solutions
- One system for safety and automation

In the area of drive technology, the offer includes drive-integrated safety functions, safe logic functions and the connection of visualisation, sensor and actuator technology.
Your automation at a glance!

Your automation projects can be managed using the web-based visualisation software PASvisu for simple configuration and optimum visualisation. So you can easily achieve a convenient, comprehensive overview of your plant – locally and via remote access; with sophisticated visualisation thanks to the most diverse style sheets. And the simple, intuitive visualisation software makes work more enjoyable: PASvisu.
This is how you benefit from PASvisu

**Intuitive and pleasing on the eye:**
- Simple, intuitive handling and maximum suitability for use
- Fast, safe automation
- Future-proof and platform-independent
- Use of current web technologies: HTML5, CSS3 and JavaScript
- Accelerated projects: From engineering and runtime to maintenance
  - Link between PAS4000 and PASvisu projects enables shorter project times
  - Faster engineering, as variables do not need to be entered and assigned manually
- Flexible application on a wide range of end devices as the system is platform-independent, thanks to the use of web technology
- Few downtimes thanks to remote access with genuine Client/Server functionality
- Uniform look-and-feel thanks to project-wide design templates (CSS3 style sheets)

**Prerequisites**
- You use the automation system PSS 4000 from Pilz.
- You use the software platform PAS4000 to program and configure your PSS 4000 project.

**Structure of PASvisu**

PASvisu consists of the configuration tool PASvisu Builder and PASvisu Runtime.

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Scan the QR code to find out more about PASvisu.

Further information on the subject of PASvisu:

Webcode: web77550

Online information at www.pilz.com

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This is how you benefit from PASvisu
Visualisation – simple and intuitive

Simple and intuitive work with the PASvisu Builder

Visualisation using tiles – simple and intuitive

Work with predefined GUI elements (tiles), which already include all relevant properties such as prefix, suffix and error status. Tiles are positioned clearly with optimum alignment on the configuration page via drag and drop. The process variables are linked via automatic filtering in the tool, which suggests the variable directly during entry (no need to create variables manually). This guarantees a fast, intuitive and error-free work process.

Tiles are simply positioned on the grid of the configuration page.

A wide range of predefined GUI elements (tiles).
**Consistent appearance across the project**
Through the separation of function and appearance on CSS3 (Cascading Style Sheets), a variety of predefined styles are available for selection within the project.

You can change the appearance across the project with a single click. Your project always looks like it’s from one source. What’s more, minimum effort is needed to make subsequent changes or customise the project.

**PASvisu for all phases of the machine lifecycle**

- **Design**
  - Simple definition of the process variables
  - Uncomplicated simulation in the design phase
  - Ideal presentation of the interaction between the control system and the visualisation project

- **Engineering**
  - No duplicated entries (variables created and mapped automatically)
  - No sources of errors during programming

- **Operation**
  - Simple to expand at any time
  - Automatic synchronisation
  - Plant mobility due to remote access

- **Service**
  - Simpler orientation, also during servicing
  - Web remote access to plant (local, Internet)
  - Self-documentation

Optimum link between control project (PAS4000) and visualisation (PASvisu).
Optimum link:
Control project and visualisation
The PAS4000 control project is linked simply and directly using the PASvisu Builder project. As a result you automatically have full access to all process variables as well as the complete namespace of the PSS 4000. This means that information such as the project’s checksum or the firmware version of the PSSu PLC header can also be called up. Potential error sources due to variables being entered manually or imported are no longer an issue.

Further benefits are:
- Automatic variable mapping
- Automatic synchronisation, i.e. changes to the PSS project, are displayed in the PASvisu Builder, and you are always working with the very latest version of the PSS project

Control diagnostics
The (safety) blocks configured in the control system are shown grouped as predefined tiles in the visualisation. In this case the selection is made via the instance name rather than the individual variables.

All the safety blocks used in the control project (from the software PAS4000) are automatically available in the PASvisu Builder and can be used directly for graphical block diagnostics. All relevant variables are already linked to these Pilz hardware tiles. The diagnostic list (alarms and remedial measures) and the history can also be shown. In addition, a tile is available with the LED status of the PSS 4000 hardware.
Always in the picture – remote access via web

With the use of HTML5 web technology, access occurs across platforms and is thus possible with virtually any end device such as PC, tablet or smartphone in the respective standard HTML5 browser. You also have the benefit of a genuine Client-Server architecture: the current page is displayed and remote maintenance is detached from on-site operation.

Web client access to PASvisu:
The PASvisu Server regulates data exchange with all connected web browsers.

With PASvisu you always have all your automation at a glance: simply, easily and in high visual quality.
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