Compact Product Suite
Panel 800 Version 6
Panel 800 Version 6
Overview of the presentation

Trends within HMI
Introduction to Panel 800 Version 6
Key benefits
Panel 800 Version 6 Details
Summary
Trends within HMI

- Fast and cost-effective development
- Strong focus on ease-of-use and usability
- Intuitive operator interaction as base for cost-effective production
- Navigation and interaction influenced by mobile devices
- Increasing HMI performance provides higher flexibility
- Less texts and more graphics, animation and 3D-navigation
Panel 800 Version 6
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Summary
Panel 800 Version 6
The right information at the right time, in the right place

Get everything you expect…
- Solid and comprehensive HMI functionality such as recipes, trends, audit trails, schedulers
- Efficient and safe operation

…and much more.
- Open and flexible HMI solution enabling, e.g. C# scripting and use of .NET components
- Custom-made functionality
Panel 800 Version 6
Brand new panel series based on latest technology

- **PP871**
  - Display size 4.3”
  - Display format 16:9
  - Resolution 480x272

- **PP874**
  - Display size 7”
  - Display format 16:9
  - Resolution 800x480

- **PP877**
  - Display size 10.4”
  - Display format 4:3
  - Resolution 640x480
Panel 800 Version 6
A robust, capable HMI wherever you want one
Panel 800 Version 6
Overview of the presentation

Trends within HMI

Introduction to Panel 800 Version 6

Key benefits

- Ease of use
- State-of the art graphics
- Robust and reliable technology
- Truly open platform

Panel 800 Version 6 Details

Summary
Panel 800 Version 6
One of the fastest, most powerful panel on the market

Key benefits

- Ease of use - Built-in and comprehensive HMI functionalities
- State of the art graphics – Vector-based, high resolution graphics
- Robust and reliable technology – Strong yet lightweight
- Truly open platform – Built on open architecture
Ease of use
Language support minimizes the risk of mistakes

- Unlimited support for languages in the operator interface
- Can be changed in runtime
- Seven languages supported in the Engineering tool Panel Builder
Ease of use
Built-in report generator boost process insight

- Automatic generation of reports
- Improves production overview and follow-up
Ease of use
Built-in predefined styles ready to use

- Easy to create a customized and consistent look
- Change one or all objects with one click saves engineering time
- Use the built-in styles or create your own
Ease of use
Assign attributes to several objects with one click

- Change of common attributes for many objects with one mouse click saves time
- The risk of missing an important change is avoided
- Use for changing display colors, security setting, tags, coupling and more
Ease of use
Efficient engineering with the Panel Builder 800

- Panel 800 incorporates the familiar Microsoft Window environment
- Intuitive ribbon menus and Windows media objects improves engineering friendliness and efficiency
- Function menu and preconfigured controls speeds up engineering even further
Ease of use
Alias screens saves development time

- Saves lots of configuration time as well as memory
- Fast and easy to create graphical identical screens
- Connect tags at one place only
- Only one screen needed that can be reused for several machines, faceplates etc
Ease of use
Easily and effectively handle large projects

- Screen explorer with built-in zoom enables fast creation of a complete structure
- Ensures a good screen overview
- Saves engineering time and effort
Panel 800 Version 6
Overview of the presentation

Trends within HMI

Introduction to Panel 800 Version 6

Key benefits
- Ease of use
- State-of-the art graphics
- Robust and reliable technology
- Truly open platform

Panel 800 Version 6 Details

Summary
State-of-the-art graphics

Animated labels increases efficiency

- Show lots of text in a small area with controlled speed and direction
- Dynamic text via tag or script
- Speeds up and ensures correct process interaction
State-of-the art graphics
Greater feeling and better operator interaction

- Field-size, scroll-list width and colors can be easily customized to fit operator’s preference
- Process interaction is quicker, easier and more effective
State-of-the-art graphics
Easy-to-understand charts

- Helps operators detect discrepancies faster than with traditional print-outs
- Promote fast decision and action
- Improve process availability, safety and quality
State-of-the-art graphics
Roller panels speed up and ensure correct interaction

- Improve speed, simplicity and security compared to a traditional numerical keyboard
- Saves valuable screen space
State-of-the-art graphics
Action menus allow fast navigation and save space

- Facilitate fast and easy navigation to graphics, or to perform actions
- Help operators do the right thing at the right time
- Saves valuable space i.e. cost (you can do with a smaller panel)
State-of-the art graphics
High-resolution, rich-color display

- The 64,000-color TFT display produces sharp and detailed views from all angles
- Dimmable backlight make Panel 800 ideal in light-sensitive environments
Panel 800 Version 6
Overview of the presentation

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- Ease of use
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Panel 800 Version 6 Details
Summary
Robust and reliable technology
Robust design for tough environments

- Strong, yet lightweight aluminum housing
- IP66 front casing (PP874 IP65) enables it to withstand wet, dusty and demanding environments
- Operating temp -10 to 60°C *
- Clamp-on mechanism eliminates screw holes where moisture and dirt can accumulate
- Flat surface that’s easy to clean
Robust and reliable technology
Resistive touch for reliable operation

- High resistance to liquids and contaminants ensures security and reliability
- Responsive even when the operator uses gloves
Robust and reliable technology
Simple testing, back-up and verification

- Offline and online simulation can be done with or without live data from controllers.
- Engineers can download projects directly to panels via network connection or USB.
- Projects can be backed up completely into the panel, with the option to verify that the same project exists in both the panel and the Panel Builder.
Robust and reliable technology
Login and audit trail safeguard operations

- Different log-ins for different users and user groups ensures right access
- An audit trail function shows the process changes and actions taken by any user
- Improves process security and reliability
Panel 800 Version 6
Overview of the presentation

Trends within HMI
Introduction to Panel 800 Version 6
Key benefits
- Ease of use
- State-of the art graphics
- Robust and reliable technology
- Truly open platform
Panel 800 Version 6 Details
Summary
A truly open platform
Multi-brand controller connectivity

- ABB COMLI Master
- ABB COMLI Slave
- ABB Modbus AC31 Master
- ABB Modbus AC500 Master
- Allen-Bradley ControlLogix Master
- Allen-Bradley DF1 Point to Point
- Allen-Bradley DH485 Token slave
- Allen-Bradley MicroLogix Ethernet Master
- Allen-Bradley SLC/PLC5 Ethernet Master
- Altus Alnet I Point to Point
- Animatics SmartMotor Master
- Beckhoff ADS Master
- Bernecker+Rainer Driver Point to Point
- Bosch Rexroth IndraDrive Master
- Control Techniques Unidrive Slave
- Delta DVP-Series Master
- DEMO
- EMERSON Modbus Master
- Fatek Facon Master
- GE Fanuc Ethernet Master
- GE Fanuc SNPX Master
- Hitachi H-series HCOMM Point to Point
- IAI X-Sel Master
- Iddec MICRO series Point to Point
- Johnson Controls Master
- KEB COMBIVERT Master
- KEYENCE KV-Series Master
- Koyo DirectNET Master
- Koyo K-Sequence Point to Point
- Lenze LECOM A/B Master
- LS Glofa Master
- LS Master-K Master
- Matsushita FP-series Mewtocol Master
- MODBUS Master ASCII/RTU/TCP Master
- MODBUS Slave RTU/TCP Slave
- Omron FINS Master
- Omron Host Link Master
- Saia Serial/Ethernet Master
- SIMATIC S5 PG Point to Point
- SIMATIC S7 ISO over TCP/IP Master
- SIMATIC S7 200 PPI Master
- SIMATIC S7 MPI Direct Token
- SIMATIC S7 MPI EM Token
- SIMATIC S7 MPI (HMI Adapter) Point to Point
- SIMATIC TI500 Point to Point
- Vigor M/VB-Series Master
- WAGO Modbus TCP Master
- Yamaha VIP Point to Point
- Yaskawa Memobus Master
- Yokogawa FA.M3

- OPC DA & UA* (**Not for ABB)
  - Local host
  - Remote Server

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A truly open platform
Gateway functionality

- The panels can be used as a gateway
- Signals between different controllers can be sent via the panel
- Simple and secure solution with no extra cost
A truly open platform

Truly open platform

- Easy to code specific functionality with C# scripting
- Use WPF components
- Make your own .NET controls
- Debug through Visual Studio
- Improves operation performance and productivity
A truly open platform
Quick and effective response to alarms

- Automatic distribution of alarms to other panels, printers, mobile phone(SMS) and e-mail
- Ensures speedy and accurate response
- Improves process availability and safety
A truly open platform
Remote access via Web server

- Web pages for viewing panel data
- Panel remote control

- Ipad
Panel 800 Version 6
Overview of the presentation

Trends within HMI
Introduction to Panel 800 Version 6
Key benefits
  ▪ Ease of use
  ▪ State-of the art graphics
  ▪ Robust and reliable technology
  ▪ Truly open platform
Panel 800 Version 6 Details
Summary
New Panel 800 communication
Ports and interfaces

- 24V Power Supply
- Serial ports (combined ports supporting RS232, 422 and 485)
- Ethernet 10/100 Mbit
Additional ports
Usability and smart solutions

- Slot for expansion card to the internal USB
- Protected external media (memory expansion and fast application loading)

Applies for 870 series, not the 880 series
Panel 800 Version 6
Specifications

<table>
<thead>
<tr>
<th>Technical Data</th>
<th>PP671</th>
<th>PP874</th>
<th>PP877</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panel</td>
<td>PP671</td>
<td>PP874</td>
<td>PP877</td>
</tr>
<tr>
<td>Display size</td>
<td>4.3&quot;</td>
<td>7&quot;</td>
<td>10.4&quot;</td>
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<tr>
<td>Display resolution, ratio</td>
<td>480 x 272 (16:9)</td>
<td>800 x 480 (16:9)</td>
<td>640 x 480 (4:3)</td>
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<td>Display colors</td>
<td>TFT-LCD 65 T</td>
<td>TFT-LCD 65 T</td>
<td>TFT-LCD 65 T</td>
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<td>Active area of display, WxH (mm)</td>
<td>95.0 x 53.9</td>
<td>152.4 x 91.4</td>
<td>211.2 x 158.4</td>
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<td>Brightness (cd/m²)</td>
<td>350</td>
<td>450</td>
<td>450</td>
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<tr>
<td>View angle (H/V)</td>
<td>115° / 140°</td>
<td>130° / 140°</td>
<td>140° / 180°</td>
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<tr>
<td>View angle (H/V)</td>
<td>&gt; 40,000 hrs, LED backlight</td>
<td>&gt; 20,000 hrs, LED backlight</td>
<td>&gt; 40,000 hrs, LED backlight</td>
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<td>Touch screen operations</td>
<td>Resistive touch, 1 million finger touch operations</td>
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<td>Processor</td>
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<td>128 MB (DDR2)</td>
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<td>Application memory</td>
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<td>External storage media</td>
<td>1 x SD card (optional)</td>
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<td>Realtime clock</td>
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<td>Ethernet</td>
<td>1 x 10 Base-T / 100 Base-T (shielded RJ 45)</td>
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<td>USB</td>
<td>1 x USB 2.0, max. 200 mA</td>
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<td>Serial port 1/2</td>
<td>2 combined ports: 2 x RS232, 2 x RS422/485</td>
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<td>Communication modules</td>
<td>CAN (FreeCAN), MPI*</td>
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<tr>
<td>Dimension WxHxD (mm)</td>
<td>145 x 103 x 49</td>
<td>204 x 143 x 49</td>
<td>290 x 228 x 51</td>
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<td>Cut-out dimension WxHxD (mm)</td>
<td>128 x 87 x 43</td>
<td>187 x 126 x 43</td>
<td>262 x 200 x 46</td>
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<td>Net weight (kg)</td>
<td>ca. 0.6</td>
<td>ca. 0.8</td>
<td>ca. 1.5</td>
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<td>Powder-coated aluminum, Polyester Autotex F157 or F207</td>
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<td>Mounting</td>
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<td>Panel Mount and VESA 75 x 75</td>
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<td>Protection (front/rear)</td>
<td>IP65 and IP66**/IP20</td>
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<td>Power supply</td>
<td>+24 VDC (18-32 VDC)</td>
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<td>Power consumption</td>
<td>3.6 W</td>
<td>6.0 W</td>
<td>9.6 W</td>
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<td>Operating temperature</td>
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<tr>
<td>Storage temperature</td>
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<tr>
<td>Certification</td>
<td>CE, UL 508, DNV**</td>
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</table>

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* In progress
**PP874: IP 65 only
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