Field Products

Paperless Recorders and Data Acquisition Solutions
Paperless Recording to Match Your Application

Honeywell offers a broad product portfolio of data acquisition products to address most industrial recording needs. Direct sensor connections, Ethernet communications, customizable displays, advanced math functions and a wide selection of data storage choices make it easy to set up, use and analyze your process data. Your operation runs smoothly, safely and efficiently. Data acquisition products are available worldwide from authorized Honeywell representatives.

Industries:
- Biotech
- Chemical
- Food processing
- Industrial heating
- Manufactured goods
- Metals processing
- Pharmaceutical
- Power generation
- Semiconductor
- Water and waste

Typical Applications:
- Drying ovens
- Environmental monitoring
- Fermentation processes
- Flow monitoring
- Freeze drying
- Retorts and cooking processes
- Sintering furnaces
- Sterilization
- Heat treating
- Power monitoring

Precise and reliable process measurements are essential in virtually every industrial process. Precise and reliable measurements provide many significant benefits:

- Consistent product quality
- Compliance monitoring
- Improved process efficiency
- Improved equipment monitoring
- Process documentation
- Process savings
See, Store, Send Data Securely

Flexibility
- Ease of use achieved with informational graphics and touch screen displays
- Personal delivery of process data at the recorder by user-developed customizable displays
- Batch recording or continuous data
- Independent storage rates assignable to each pen
- A "credit management system" provides flexibility to select and manage the recorder’s firmware features
- Internal math functionality is supported by full math with an additional powerful math scripting language
- Multiple data storage: removable compact flash port, on-board non-volatile flash, USB flash storage ports
- Event marker system to initiate actions using alarms, digital inputs, totalizers and other causes to create effects such as start/stop/reset functions or to cause state changes

Data and Process Monitoring
- Networking via Ethernet with Modbus TCP/IP
- RS485/Modbus
- Web-enabled
- Real-time data acquisition
- FTP (File Transfer Protocol)
- OPC server support in recorder
- Data archived to integral database
- DHCP/Fixed addressing
- Export data to spreadsheet
- Remote viewing and control

Security
- FDA 21 CFR Part 11 compliant
- Password management system for up to 50 different users with four levels of protection plus an Administrator
- Encrypted secure data file protection, which includes the recorder setup information
- Audit trial of actions
- Diagnostics, LifeRecord and HealthWatch reporting capabilities
- Secure download and data retention
- Front and rear cover wire seal provision

See, Store, Send Data Securely
Display Versatility

**Custom Displays to Exactly Suit Your Application**

The recorder menu structure is designed to allow easy navigation through each screen for fast, reliable set-up of recording, networking and data storage. Screen displays provide an integral indicator to show the path used to get to the current screen.

Set-up is fully password protected, supporting multiple users and passwords along with an audit trail of actions.

Set-up is defined in terms of pens, not computer files, making it easy to relate process information to the recorded data.

Screens are easily selected to view as trends, digitals, bars, a combination of these or as a custom designed screen. This makes it easy to view the data and take action.

Select from different screens and adjust the chart speed with the touch of a finger.

Quickly replay the historical data to view past events and data or use the find and zoom functions to focus on specific events.

Screen Designer software allows you to design unique display layouts for transfer to the recorder. Customized screens allow the user to create the best display to match the application needs.

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**Analyze and Communicate**

**TrendManager Pro**

Industry leading PC based data analysis package that supports:

- Importing data from any recorder
- Archiving data
- Multi-level, multi-user passwords
- Graph, plot and export data across any recorder, pen or time frame
- Audit trails
- Configuration of recorders
- Batch recorder management

**TrendServer Pro**

Industry leading PC based communications software to network your recorders:

- Handles client/server architecture
- Schedule downloads of recorder data (FTP transfers)
- Remotely configure recorders
- Real time data acquisition
- Communicate via RS485 and/or Ethernet
- OPC server support
- Modbus, FTP, web browser

**Database Management Tool**

Provided with TrendServer Pro

- Provides safe administration of data
- Archive, sort, move, copy or delete data in local or remote database
- Use tree structure for easy understanding of where files are located
- Data viewed by recorders or monthly archive
- Allows storage of data to secure server
## Product Features

<table>
<thead>
<tr>
<th>Features</th>
<th>eZtrend QXe</th>
<th>Minitrend QX</th>
<th>Multitrend SX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chart Size / Screen Size</strong></td>
<td>127 mm (5.0 in)</td>
<td>140 mm (5.5 in)</td>
<td>307 mm (12.1 in)</td>
</tr>
<tr>
<td><strong>Number of Inputs</strong></td>
<td>Up to 12</td>
<td>Up to 16</td>
<td>Up to 48</td>
</tr>
<tr>
<td><strong>Input Signal Type</strong></td>
<td>Thermocouple, RTD, Pulse, mA, mV, Ohms</td>
<td>Thermocouple, RTD, Pulse, mA, mV, Ohms</td>
<td>Thermocouple, RTD, Pulse, mA, mV, Ohms</td>
</tr>
<tr>
<td><strong>Scan Rate</strong></td>
<td>100/200/500 ms</td>
<td>20 ms (linear input)* / 100 ms</td>
<td>20 ms (linear input)* / 100 ms</td>
</tr>
<tr>
<td><strong>Chart Speed / Display Rate</strong></td>
<td>1 to 6000 mm/hr (0.04 to 240 in/hr)</td>
<td>1 to 6000 mm/hr (0.04 to 240 in/hr)</td>
<td>1 to 6000 mm/hr (0.04 to 240 in/hr)</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>0.1% Typical - T/C</td>
<td>0.1% Typical - T/C</td>
<td>0.1% Typical - T/C</td>
</tr>
<tr>
<td><em><em>Screen Design</em> (Custom Screens)</em>*</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><em><em>Alarm Outputs</em> / Alarm SP</em>*</td>
<td>Up to 8 / 6 per pen</td>
<td>Up to 16 / 6 per pen</td>
<td>Up to 48 / 6 per pen</td>
</tr>
<tr>
<td><strong>Digital Inputs</strong>*</td>
<td>Up to 8</td>
<td>Up to 16</td>
<td>Up to 48</td>
</tr>
<tr>
<td><strong>Auxiliary Output</strong>*</td>
<td>None</td>
<td>Up to 4</td>
<td>Up to 8</td>
</tr>
<tr>
<td><strong>Transmitter Power</strong>*</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Totalizer(s), Counters</strong>*</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><em><em>Math Functions</em> / Math Scripts</em>**</td>
<td>Yes / No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Communications</strong></td>
<td>Ethernet / RS485*</td>
<td>Ethernet / RS485 / OPC Server*</td>
<td>Ethernet / RS485 / OPC Server*</td>
</tr>
<tr>
<td><strong>Front Face Protection Rating</strong></td>
<td>IP54 / NEMA 3, IP66 / NEMA 4X*</td>
<td>IP54 / NEMA 3, IP66 / NEMA 4X*</td>
<td>IP54 / NEMA 3, IP66 / NEMA 4X*</td>
</tr>
<tr>
<td><strong>Case Size (W x H x D)</strong></td>
<td>144 x 144 x 200 mm (5.7 x 5.7 x 7.9 in)</td>
<td>144 x 144 x 200 mm (5.7 x 5.7 x 7.9 in)</td>
<td>300 x 300 x 200 mm (11.8 x 11.8 x 7.9 in)</td>
</tr>
<tr>
<td><strong>Cutout Size (W x H)</strong></td>
<td>138 x 138 mm (5.4 x 5.4 in)</td>
<td>138 x 138 mm (5.4 x 5.4 in)</td>
<td>281 x 281 mm (11.06 x 11.06 in)</td>
</tr>
<tr>
<td><strong>Instrument Power</strong></td>
<td>90 to 250 Vac, 20-30 Vdc / 20-25 Vac*</td>
<td>90 to 240 Vac, 20-50 Vdc / 20-30 Vac*</td>
<td>90 to 240 Vac, 20-50 Vdc / 20-30 Vac*</td>
</tr>
<tr>
<td><strong>Approval</strong></td>
<td>CE, UL/CSA*</td>
<td>CE, UL / CSA*, FM CL 1 Div 2*</td>
<td>CE, UL / CSA*, FM CL 1 Div 2*</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>Color LCD (Active TFT) QVGA</td>
<td>Color LCD (Active TFT) QVGA</td>
<td>Color LCD (Active TFT) SVGA</td>
</tr>
<tr>
<td><strong>Data Storage</strong></td>
<td>USB memory key</td>
<td>Compact flash / USB memory key</td>
<td>Compact flash / USB memory key</td>
</tr>
<tr>
<td><strong>Chart Type</strong></td>
<td>Electronic media</td>
<td>Electronic media</td>
<td>Electronic media</td>
</tr>
<tr>
<td><strong>Portable Case</strong></td>
<td>Yes*</td>
<td>Yes*</td>
<td>Yes*</td>
</tr>
<tr>
<td><strong>HealthWatch / Maintenance</strong></td>
<td>Yes*</td>
<td>Yes*</td>
<td>Yes*</td>
</tr>
<tr>
<td><strong>Remote Viewing</strong></td>
<td>Yes*</td>
<td>Yes*</td>
<td>Yes*</td>
</tr>
</tbody>
</table>

*Optional

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## For More Information

To learn more about Honeywell’s paperless recorders, visit www.honeywellprocess.com or contact your Honeywell account manager.

## Process Solutions

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