Controllers, Indicators & Set Point Programmers

PROCESS CONTROL
MADE EASY

Honeywell Solutions for Indicators and Controls
General Purpose Controllers

Efficient, Effective, Easy

Efficient operation of your process demands accurate control at a cost effective price. Honeywell addresses these needs with a line of general purpose controllers at competitive prices. Included are temperature controllers with relay outputs for on-off control of ovens, and controllers with analog outputs to position actuators, valves and speed couplings. The UDC 700 1/32 DIN controller is your easy choice for applications where panel space is limited. Other features on selected models are digital inputs, alarm outputs and RS485 ASCII or Modbus communication.

Available on Selected Models:
- Single or Dual Loop Control to match your needs
- Universal analog inputs for easy installation
- Analog or Digital outputs to control your process
- Digital outputs for alarming
- Digital inputs for selecting control functions
- Dial based operator interface
- NEMA 4 / IP66 front face for outside installation
- 1/32 to 1/4 DIN size to adapt to your panel
- RS 485 ASCII or Modbus for easy networking

Enhanced Controllers

Configuration & Operation made Quick and Easy

Honeywell offers a complete line of enhanced controllers with incremental levels of functionality and cost for processes requiring more than general purpose control. Available for both single-loop and dual-loop applications, this selection helps save you money because you only purchase the additional capability you need.

All Honeywell enhanced controllers feature easy to read prompts for quick configuration and operation. Unique features such as Accutune III and Fuzzy Logic overshoot protection, as well as Healthwatch diagnostic software, are available on selected models.

Available on Selected Models:
- Single or dual loop control to match your needs
- Universal analog inputs for easy installation
- RH, Radiamatic, carbon and oxygen inputs
- Analog or digital outputs to control your process
- Digital outputs for alarming
- Digital inputs for selecting control functions
- Vertical bar display for easy operator monitoring
- HealthWatch diagnostic software
- Accutune III tuning and Fuzzy Logic Overshoot Protection
- RS 422/485 ASCII or Modbus RTU for easy networking
- Ethernet communications
- Infrared communications port

Easy System Tuning with Accutune™ III & Fuzzy Logic

Available on the UDC 2500, 3200 and 3500 Controllers

Accutune III provides a new truly plug-and-play tuning algorithm which will, at the touch of a button or through a digital input, accurately identify and tune any process, including integrating processes and those with deadtime. This speeds up and simplifies startup, plus allows automatic retuning at any setpoint. Also, Accutune adaptive tuning algorithm will automatically and continuously retune whenever a setpoint step change is implemented or whenever a process variable disturbance occurs.

Fuzzy Logic is used to suppress process variable overshoot due to setpoint changes or externally induced process disturbances. It operates independently from Accutune tuning. It does not change PID constants, but temporarily modifies the internal controller response to suppress overshoot. This makes it easier to use more aggressive tuning to maintain smooth process variable responses. Fuzzy Logic can be enabled or disabled depending on your application or the control criteria.
Indicators
High Performance and High Quality at an Affordable Price
Honeywell single and dual digital indicators provide display of process variables with a wide choice of functionality. These indicators combine high performance and quality at an affordable price, making them ideally suited for most applications. Honeywell indicators are perfect companions for applications requiring both control and accurate indication. They are based on the same field proven design platform as our controllers.

Available on Selected Models:
- Universal analog inputs for easy installation
- RH, Radiomatic inputs
- Digital outputs for alarming
- 24 VDC transmitter power supply
- 1/32 to 1/4 DIN size
- RS 422/485 ASCII or Modbus RTU for easy networking

Set Point Programmers
From Basic to Complex — it’s an Easy Choice
Digital control programmers perform prede-termined processing or testing schedules on a time-versus-set point program. Honeywell offers programmers that perform basic to complex recipes and feature universal inputs. Available in single and multi-channel models, Honeywell programmers can support up to 99 program profiles with up to 99 segments per profile.

Available on Selected Models:
- 4 - 99 programs, 16 - 99 segments per program
- Single or dual loop control to match your needs
- Universal analog inputs for easy installation
- Analog or digital outputs to control your process
- RH inputs
- Digital outputs for alarming
- Digital inputs for selecting control functions
- RS 485 ASCII or Modbus for easy networking
- LCD touch screen

UDC2500, UDC3200 & UDC3500
Universal Digital Controllers
Easy to Install, Easy to Configure, Easy to Operate and Easy to Own
Built on a legacy of performance and reliability, our new controllers deliver even more power, more flexibility and higher performance.

Features
- Infrared PC & Pocket PC Configuration
- NEMA 4X, IP65 Front Face Protection
- Accutune III
- Ethernet & Modbus Communications

Typical Applications
- Metals, Glass, Ceramics, Plastics
- Food and Beverage
- Furnaces and Ovens
- Packaging
- Painting and Coating

Illustration of 3 Typical Problems resolved by ACCUTUNE
Honeywell offers a complete portfolio of products and solutions for process and machine control applications, including controllers, recorders, transmitters, actuators, smart sensors, and analytical instruments. To learn more about these offerings and how they can help your organization achieve breakthrough results, contact your local Honeywell representative, or contact us at the following phone numbers:

USA: 1-800-343-0228
Canada: 1-800-461-0013
France: 33 1 60 19 80 75
Italy: 39 02 9214 6503
UK: 44 1344 655251
Spain: 34 91313.61.00
Germany: 49 69 8064-336
Asia/Pacific: 65 6355 2828
Latin America: 1-305-805-8188

**Warranty/Remedy**

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective.

The foregoing is Buyer’s sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing, however we assume no responsibility for its use. While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

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### Condensed Specifications

<table>
<thead>
<tr>
<th>Controllers</th>
<th>Accuracy</th>
<th>Loops</th>
<th>Digital Outputs</th>
<th>Analog Inputs/ Alarm Outputs</th>
<th>Digital Inputs/ Alarm Outputs</th>
<th>Panel Size</th>
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<tbody>
<tr>
<td>UDC 100</td>
<td>0.5%</td>
<td>1</td>
<td>1 or 2</td>
<td>1 or 2 / pending</td>
<td>0 / 1</td>
<td>1/4 DIN</td>
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<tr>
<td>UDC 700</td>
<td>0.1%</td>
<td>1</td>
<td>1 or 2</td>
<td>1 / 0</td>
<td>0 / 1 or 2</td>
<td>1/32 DIN</td>
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<tr>
<td>UDC 1200</td>
<td>0.1%</td>
<td>1</td>
<td>1 or 2</td>
<td>1 / up to 3</td>
<td>1 / 1 or 2</td>
<td>1/16 DIN</td>
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<tr>
<td>UDC 1700</td>
<td>0.1%</td>
<td>1</td>
<td>1 or 2</td>
<td>1 / up to 3</td>
<td>1 / 1 or 2</td>
<td>1/8 DIN</td>
</tr>
<tr>
<td>DC 1010</td>
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<td>1</td>
<td>1 or 2</td>
<td>1 or 2 / 1 or 2</td>
<td>0 / 1 to 3</td>
<td>1/16 DIN</td>
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<tr>
<td>DC 1020</td>
<td>0.5%</td>
<td>1</td>
<td>1 or 2</td>
<td>1 or 2 / 1 or 2</td>
<td>0 / 1 to 3</td>
<td>1/8 DIN</td>
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<tr>
<td>DC 1030</td>
<td>0.5%</td>
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<td>1 or 2</td>
<td>1 or 2 / 1 or 2</td>
<td>0 / 1 to 3</td>
<td>3/16 DIN</td>
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<tr>
<td>DC 1040</td>
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<td>1 or 2</td>
<td>1 or 2 / 1 or 2</td>
<td>0 / 1 to 3</td>
<td>1/4 DIN</td>
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<tr>
<td>UDC 2500</td>
<td>0.25%</td>
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<td>1 or 2</td>
<td>2 / 2</td>
<td>2 / 2</td>
<td>1/4 DIN</td>
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<tr>
<td>UDC 3200</td>
<td>0.20%</td>
<td>1</td>
<td>1 or 2</td>
<td>2 / 2</td>
<td>2 / 2</td>
<td>1/4 DIN</td>
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<tr>
<td>UDC 3500</td>
<td>0.1%</td>
<td>1 or 2</td>
<td>1 or 2</td>
<td>Up to 5 / Up to 3</td>
<td>Up to 4</td>
<td>1/4 DIN</td>
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<table>
<thead>
<tr>
<th>Indicators</th>
<th>Analog Inputs</th>
<th>Display Type</th>
<th>Digital Inputs/ Alarm Outputs</th>
<th>Transmitter Power</th>
<th>Panel Size (H x W)</th>
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<tbody>
<tr>
<td>UDC 700</td>
<td>1</td>
<td>4 Digit LED</td>
<td>0 / 2</td>
<td>No</td>
<td>1/32 DIN</td>
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<tr>
<td>UDI 1700</td>
<td>1</td>
<td>4 Digit LED</td>
<td>1 / 3</td>
<td>Yes</td>
<td>1/8 DIN</td>
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<table>
<thead>
<tr>
<th>Set Point Programmers</th>
<th>Loops</th>
<th>Programs/ Program Segments</th>
<th>Analog Inputs/ Analog Outputs</th>
<th>Digital Inputs/ Alarm Outputs</th>
<th>Panel Size (H x W)</th>
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<tr>
<td>DCP 50</td>
<td>1</td>
<td>4 / 16</td>
<td>1 / 1, 2 or 3</td>
<td>1 / 1 or 2</td>
<td>1/16 DIN</td>
</tr>
<tr>
<td>DCP 100</td>
<td>1</td>
<td>8 / 16</td>
<td>1 / 1, 2 or 3</td>
<td>6 / 8</td>
<td>1/4 DIN</td>
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<tr>
<td>DCP 300</td>
<td>1 or 2</td>
<td>19 / 30</td>
<td>1 or 2 / 1, 2 or 3</td>
<td>12 / 8</td>
<td>1/4 DIN</td>
</tr>
<tr>
<td>DCP 550</td>
<td>1 or 2</td>
<td>99 / 99 *</td>
<td>1 or 2 / 1, 2 or 3</td>
<td>16 / 16 events</td>
<td>9/16 DIN</td>
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<tr>
<td>IPC 5000</td>
<td>2</td>
<td>32 / 100 **</td>
<td>2 / 2</td>
<td>12 / 12</td>
<td>196mm x 131mm</td>
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</tbody>
</table>

* 2000 total max  
** 800 total max

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