



*Exceeding Expectations Every Day*

# Precision Quincy Options Brochure

**A guide to selecting the right oven options  
for your process applications.**

Precision Quincy Ovens  
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## *Exceeding Expectations Every Day*

At Precision Quincy Ovens, our philosophy is to make it easy and enjoyable to work with us. When we engineer your industrial oven, we know the importance of meeting our commitments to you. Our customer-first approach ensures that our products match your unique needs for any size of type of industrial heating, drying, coating, or curing oven.

Precision Quincy Ovens can create a customized industrial oven or update your current oven with a multitude of options to fit any application and need you may have, from large conveyor ovens, to small bench ovens, and everything in-between.

Contact a Precision Quincy representative today to discuss your application and to guide you through the oven selection process at (302) 602-8738.

For new oven inquiries, contact [sales@pqovens.com](mailto:sales@pqovens.com).  
For parts and service, contact [service@pqovens.com](mailto:service@pqovens.com).



### Options Overview

- ☐ **Controllers/Programmers:** make oven operation simple and flexible
- ☐ **Chart Recorders:** permanent record of times, dates, and temperatures
- ☐ **Alarms:** audibly indicates steps within a process
- ☐ **Timers:** preset process times
- ☐ **Tower Lights:** visually indicates steps within a process
- ☐ **Door Assist Handle:** easy oven opening
- ☐ **Lighting:** improves visibility in large or dark ovens
- ☐ **Thermocouple Jacks:** read ambient and part temperatures inside the oven
- ☐ **Variable Frequency Drive:** facilitates adjustable airspeeds
- ☐ **Door Switch Shut Off:** conserve energy when doors are open
- ☐ **Fresh Air Filtration:** clean incoming air stream
- ☐ **Motorized Damper:** decreased cool down time for faster load cycling
- ☐ **Exhaust Stack:** NFPA and OSHA compliant
- ☐ **Carts:** available in a range of sizes and configurations
- ☐ **Shelves:** available in 100 or 250 pound maximum capacity

# Controllers & Programmers

Controllers are designed to make oven operation simple and flexible. All Precision Quincy Ovens come with a digital set point controller. If your process includes multiple steps and temperatures, we offer controllers with increased functionality to meet your application needs. The **Honeywell UDC2500** is standard with most ovens with the exception of the 49 Series, for which the **Partlow 1160+** is standard.

Controller	Data Recording	Ramp/Soak	Export Capability	Internal Timer	Auto On/Off	Multiple Profiles
Honeywell DCP 300 Ramp Soak		✓		✓		✓
Watlow F4		✓		✓		✓
Watlow RM	✓	✓	✓	✓	✓	✓

The Honeywell universal digital controllers deliver unmatched power, flexibility and performance in the popular 1/4 DIN size. Honeywell controllers are easy to install, easy to configure, easy to operate, and easy to own.

## Honeywell UDC2500

- Standard on most ovens
- Temperature set manually
- No auto ramp/soak control feature
- Can add optional auto shut down, tower light, and audible alarm
- Additional contacts required



Standard

## Honeywell DPC300 Ramp Soak

- Includes all of UDC2500 features
- Can store up to 19 profiles with up to 30 steps per profile
- Five contacts included



\$2,075

## Partlow 1160+

The Partlow 1160+ is a 1/16 DIN, microcontroller-based, PID controller with dual display and adaptive tuning.

- Standard controller for the 49 Series of lab ovens and 51-1000 Series bench top models
- Temperature set manually
- No auto ramp/soak control feature
- Dual 4 digit displays with choice of red/red or red/green displays
- Universal sensor input: thermocouple, RTD, mA, mV, or V
- Full PID with Pre-Tune and Adaptive Auto-Tuning
- Dual outputs for heat-cool applications
- Setpoint ramping
- Loop break alarm
- Relay or SSRD first output (mA optional)
- 90 to 264V AC powered



Standard

Watlow industrial ramping temperature controllers meet the requirements of the most demanding ramp soak controller processing applications.

Easy to set up and operate, the ramp soak controller's programming features and capabilities are ideally suited for oven applications. These ramping temperature controllers feature high-definition LCD interface display for quick and easy profile programming and controller configuration ensuring accuracy and performance you can count on from a Watlow controller.

## Watlow F4

- Highly intuitive controller, very easy to program
- Ramp/soak program with 32 profiles and up to 256 steps
- Real time clock can be used to start profiles at any time of day
- Can control automatic dampers for cool down, tower lights, and audible alarms
- Two contacts included
- User friendly with full sentence communication rather than codes



**\$1,177**

\*Highly recommended for ease of programming and operation

## Watlow RM

If you want a top of the line controller and to plan for future growth, the Watlow RM allows for infinitely expandable capabilities. It includes all capabilities of the Watlow F4 as well as below features:

- PLC control with Silver Series 4", 7", or 10" HMI touch screens.
- Provides ability to step through various predetermined temperatures, shut downs, and cool downs.
- Controls variable fan speeds for powders
- Auto turn on/off
- Remote viewing from laptops
- Alarm status via text or email



**\$4,333 - \$4,874**

Chart recorders provide a permanent record of your process times, dates, operating temperatures, and part temperatures. Each pen records data from a different point. For example, a recorder with two pens can use one pen to record the internal oven temperature and the other to record the part temperature. Chart recorders are ideal for recording batch processes and are an excellent choice for all industrial processes requiring logged data over an extended period of time.

Recorder	10 in. Circular Chart	Digital LCD Touch Screen	Number of Pens
Honeywell DR 4301	✓		1
Honeywell DR 4302	✓		2
Honeywell EZ Trend*		✓	3+

\*Standards may change in the near future and will require digital recording.

## Honeywell DR 4300 Series

The Honeywell DR 4300 Series chart recorders offer the most economical solution for recording one or two process parameters. These 10 inch circular chart recorders can handle a variety of process parameters such as temperature, humidity, pressure, and flow transmitters. The Honeywell DR 4300 Series recorders are easy to operate, maintain, and are ideal for most process recording applications that can be handled by low-cost analog recorders. However, this series no longer meets AMS-2750E standards. Digital encrypted data collection requires the Honeywell EZ Trend or the Watlow RM controller.

**Honeywell DR 4301** - One pen to record one data point

\$1,247



**Honeywell DR 4302** - Two pens to record two data points

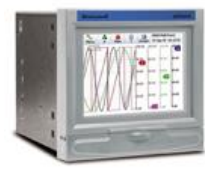
\$1,572



## Honeywell EZ Trend

Honeywell's EZ Trend is a cost-effective, general purpose electronic data recorder that easily replaces paper strip chart recorders, providing the ability to capture continuous and batch data electronically. Data is recorded in a secure digital format, eliminating errors that can arise from transposing data from a chart to a spreadsheet for analysis.

- Recommended for compliance to future standards
- Video graphic QXE Recorder
- Digital touch screen display with 5" LCD to record 3+ data points
- Price varies with the amount of data to be collected



**Call for Quote**

## Alarms

Audible alarms are a great choice for large facilities with personnel responsible for multiple process areas and industrial processes where timely removal of product is imperative to proper cure.

Audio **End-of-Cycle Timer** alarm with silencing relay (buzzer type)

**\$357**

Audio **Excessive Temperature Alert** alarm with silencing relay (buzzer type)

**\$357**



## Timers

Timers allow customers to preset process times and turn on end-of-cycle tower lights and/or audible alarms. Upgraded controllers could alleviate the need for timers. The Precision Quincy sales team will be able to provide additional information on system integration and process needs.

**Digital Timer 1** - Manual timer to turn off heat source after time has elapsed

**\$394**

**Digital Timer 2** - Auto start begins process time when temperature set point is reached

**\$500**

**Digital Timer 3** - Automatically turns off fans after set point cool down of oven has taken place

**\$394**



## Tower Lights

Visual indicators for steps within a process, the end of the cycle, or alert and alarm status. Tower lights are great for large shops and critical processes.

### End of Timer Cycle

- Visual indicator for end of cycle
- Can be used with any controller
- Visual alarm with reset relay (red/non-flashing tower light)

**\$442**

**Excessive Temperature Alert** - Visual indicator for excessive temperature alert that can be used with any controller. Alarm comes with reset relay and is available with one or three lights:

- One light - red non-flashing tower light
- Three lights - red, green, yellow non-flashing tower light

**\$442**

**\$972**



## Door Assist Handle

Door assist handles aid personnel in operating oven doors easily, regardless of size and strength. Door assist handles are available for cabinet and walk-in ovens.

Door Assist handle for **single door cabinet ovens**

**\$600**

Door Assist handle for **single door walk-in ovens** (per/door)

**\$623**



## Lighting

Interior lighting is helpful in large ovens where product isn't visible from facility lighting.

**Interior lighting up to 550°F**

- Walk in only

**\$419**



## Internal Thermocouple Jacks

Thermocouple jacks for reading ambient and part temperatures inside the oven. Thermocouples are a recommended option for any process where oven uniformity and precise part temperature are required.

**Call for Quote**



## Variable Frequency Drive

Variable Frequency Drive on recirculation fan facilitates adjustable airspeeds. This allows for maximum temperature uniformity at maximum temperature, while preventing coating blow off at lower temps. Variable Frequency Drives require the purchase of a Watlow F4 controller.

**\$1,750**



## Door Switch

Door switches are great for saving energy especially when you load or unload your oven frequently. The optional door switch turns off the heaters and circulation system when the door opens.

- Shuts off heat upon door or doors being opened
- Conserves energy when doors are open

**\$220**

## Fresh Air Filtration

Filtration packages are connected to the fresh air inlet port and clean the incoming air stream. Commonly used in powder coating, medical, and laboratory settings.

**30% Efficient**

**85% Efficient**, up to 1 micron (Most popular option)

**99.97% Efficient**, up to .01 micron



**Call for Quote**

## Automatic Motorized Damper

Open / close motorized damper packages (individually sized to exhaust) provide decreased cool down time for faster load cycling. They are also utilized in larger systems to efficiently exhaust VOC loads. An updated controller such as the Watlow F4 or Watlow RM is required.

**225 Exhaust CFM**

**\$2,147**

**550 Exhaust CFM**

**\$2,330**

**920 Exhaust CFM**

**\$2463**

**1500 Exhaust CFM**

**\$2,537**

**2200 Exhaust CFM**

**\$2701**





All ovens that have exhaust fans must also have an exhaust stack. Also, OSHA requires ovens processing flammable solvents or vapors to conform to the National Fire Protection Association Standard 86 (1999). NFPA 86 defines ovens for these applications as Class A ovens. In order to keep flammable vapor concentrations at safe levels, Class A ovens must include additional equipment to provide safety ventilation.

For over 60 years, Van Packer has been supplying the commercial and industrial markets with venting products. Van Packer has the most versatile product offered in the industry, with tees, elbows, supports, guying and transitions, with nothing left for field fabrication. Precision Quincy is an authorized distributor of Van Packer exhaust stacks.

**Information needed for a quote:**

- Ceiling height
- Ceiling material
- Pitch of roof
- Number of bends to outside location



**Van Packer NFPA and OSHA compliant custom stack kit** - Exhaust stacks are custom fit and built to meet customers' needs.

**Call for Quote**



Carts and shelves are available in a variety of sizes and arrangements. Pricing varies due to oven model, cart size, and weight.

## Flat Bed Carts

Ideal for single product loads of moderate weight. All capacities have the choice of flat plate or subway grate.

### Cart Options:

**750 pound capacity**

**1500 pound capacity**

**2500 pound capacity**

**5000 pound capacity**



**Call for Quote**

## Hanging Carts

Ideal for multiple products with hanging requirements.

### Cart Options:

**750 pound capacity**

**1500 pound capacity**

**2500 pound capacity**

**5000 pound capacity**



**Call for Quote**

## Shelf Carts

Ideal for multiple product load requirements. Shelf cart comes with two shelves and can add up to ten shelves.

### Cart and Shelf Options:

**750 pounds total, 75 pounds per shelf**

**1500 pounds total, 150 pounds per shelf**

**2500 pounds total, 250 pounds per shelf**

**5000 pounds total, 500 pounds per shelf**



**Call for Quote**

**When would I want or need a controller that has more capability than the standard?**

If your process can benefit from ramp/soak capability or user-friendly programmable profiles, you may want to upgrade to an optional controller. It is very beneficial for customers that use their oven for more than one product/process.

**Can I add an upgraded controller to an existing oven in my facility?**

Yes. This can be ordered and installed through our service department. To contact the service department, email [service@pqovens.com](mailto:service@pqovens.com).

**Is there a controller that has data recording capability, or does that need to be a separate device?**

The Watlow RM system has digital recording capability.

**What is the difference between a single pen and double pen paper chart recorder?**

A single pen will chart a single data point, and a double pen will chart two data points such as ambient temperature and part temperature.

**Does the digital recorder store data?**

Yes, it offers both internal and removable media (USB) storage. Our sales team can provide a spec sheet for the product upon request.

**How many tower lights or alarms can I have attached to an oven?**

This may depend on the level of controls installed on your oven. Additional contacts may need to be purchased to accommodate additional lights or alarms.

**If I have a controller, do I need a separate timer?**

If you have our standard digital set point controller, you would need to purchase a separate timer. If you have an upgraded controller, it may have internal timing capabilities.

**Does my oven come with a thermocouple jack?**

No. See page 7 for additional information on thermocouple jacks.

**Why would I need a motorized damper?**

If your process requires or could benefit from a controlled cool down.

**Why would I want to have an insulated floor or cart guide tracks?**

An insulated floor will help retain the heat inside of the oven instead of wasting that energy on the cold concrete below the oven. Cart guide tracks protect the ductwork from being damaged when rolling carts in and out of the oven as well as providing a space for cart wheels level to shop floor in an insulated floor.



# Contact Precision Quincy

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