

TFO Series

Forced Air Ovens

TFO-1 • TFO-3 • TFO-5

TFO-1-2 • TFO-3-2 • TFO-5-2

CASCADE™

TEK



Ideal for Industrial, Analytical and General Laboratory Applications

Cascade TEK forced air ovens are recommended for critical scientific research, analytical, and laboratory use. These oven are also suitable for use on the production floor and beyond. Typical applications include aging, curing, drying, baking, pre-heating, conditioning and life cycle testing. Choose from three cabinet sizes, each with forced-air circulation and reserve heating power for quick recovery after door openings.

TFO Ovens Features and Benefits

The TFO Series ovens are engineered for safe, accurate, and uniform performance in demanding laboratory environments.



TFO-5

- + Fast ramp-up to 306°C for faster cycle times.
- + Temperature range approximately 20°C above ambient to 306°C for multiple applications.
- 1 Watlow PM9 Plus programmable controller with ramp and soak capabilities.
- 2 Integrated Over Temperature Limit with digital set-point (OTL) to provide additional temp limit control.
- 3 Stainless steel interior construction for long life operation, easy cleaning.
- 4 Forced-air circulation to assure maximum temperature uniformity.
- 5 Triple-wall construction to minimize external surface temperature.
- 6 Stainless steel shelves are adjustable on 0.5" (12.7mm) centers to provide flexible inventory options.
- 7 Rear access port, 1.75" diameter (44mm) for independent cables, instrumentation.
- 8 Intake and Exhaust Damper, 3.0" diameter (76 mm), adjustable, with external connection to customer-supplied vent for effluent exhaust if required.
- + Internationally certified CAN/CSA, UL, EN, IEC 61010, and compliant with CE.

MADE IN
USA



Applications:

- Aging
- Asphalt Testing
- ASTM, UL, and Life Testing
- Baking, Conditioning, Curing
- Burn-in
- Drying
- Moisture and Stability Testing

High Temperature Performance

Cascade TEK forced air ovens are available in 110-120V, 50/60Hz or 220-240V, 50/60Hz configurations and achieve temperatures up to 306°C with fast ramp-up and recovery times.

Heat-Up Rapid heat-up times to 306°C get your product to temperature faster than ever.

Recovery After a standard door opening the TFO family has rapid recovery times to setpoint. Optimized air flow and heating elements allow your product to return to temperature setpoint in the shortest time yet.



TFO Oven Part ID's

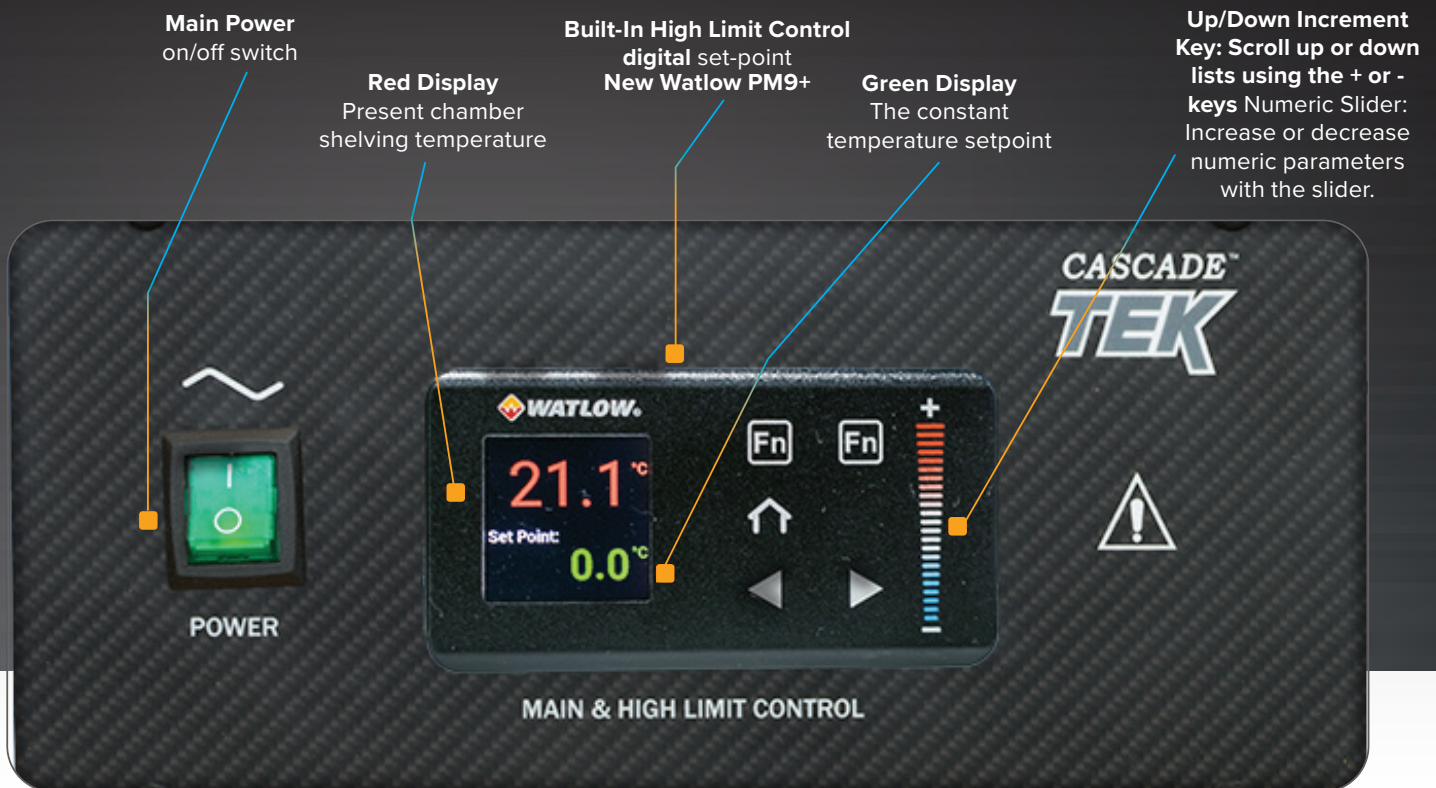
| | TFO-1 | TFO-3 | TFO-5 |
|--------------|-----------|-----------|----------|
| 110-120 Volt | CTF123 | CTF323 | CTF523 |
| 220-240 Volt | CTF123-EA | CTF323-EA | CT523-EA |

Control, Timer Program, and Monitoring

The Watlow PM9 Plus PID (proportional, integral, derivative) controller commands proportional power to the heating elements to provide the most accurate and responsive control. The control parameters are matched to the oven size to assure faster response to setpoint without overshoot, and quicker recovery following door openings. The Watlow PM9 Plus supports custom recipe creation. Each recipe can support full ramp and soak control for custom applications. A total of 4 recipes with up to 40 steps can be used to configure the oven to your process.

Integrated Watlow Control Panel

All controls are centrally located on the main panel including manual power, Watlow PM9 PLUS controller with integrated over-temperature limit and recipe control.



TFO Oven Specification Chart

| | TFO-1 | TFO-3 | TFO-5 |
|-------------------------------|---|---|---|
| Interior Volume, Nominal | 1.4 cu.ft. (39.4 liters) | 3 cu.ft. (85.0 liters) | 4.9 cu.ft. (138.0 liters) |
| Interior Dimensions W x D x H | 12.1" x 13.7" x 14.5" 307 x 349 x 368 mm | 16.5" x 19.5" x 16.2" 419 x 495 x 412 mm | 21.0" x 19.4" x 20.7" 533 x 494 x 527 mm |
| Exterior Dimensions W x D x H | 22.7" x 23.5" x 31.5" 577 x 596 x 800 mm | 26.9" x 28.6" x 34.0" 684 x 727 x 840 mm | 31.4" x 28.1" x 38.8" 798 x 714 x 986 mm |

*Extra standard and reinforced shelves available. See Accessories.

*Units can be ordered in 230V designations by adding "-2" to the part numbers. TFO-1-2, TFO-3-2, TFO-5-2

Customization Options

Cascade TEK offers a variety of customization options for any application. With our impressive team of experts, Cascade TEK builds solutions to any problem.

Forced air ovens provide the ultimate drying experience. Cascade TEK's forced air ovens are made in the USA.

- Electronically data-log your drying process
- Programmable temperature control & digital overtemp protection
- Additional access ports for feed through and power connections



Ask about reinforced shelves, chart recorders, calibrations, or any other option you require.

Cascade TEK products are built to your process!

Ready to Get Started? Contact the Cascade TEK Team Today!

☎ +1-971-371-4096 ✉ sales@cascadetek.com 🌐 cascadetek.com

TFO Series

Cascade TEK's TFO Series comes in variety of sizes to fit any application need. Visit cascadetek.com to learn more about the TFO Series!



TFO-28



TFO-10



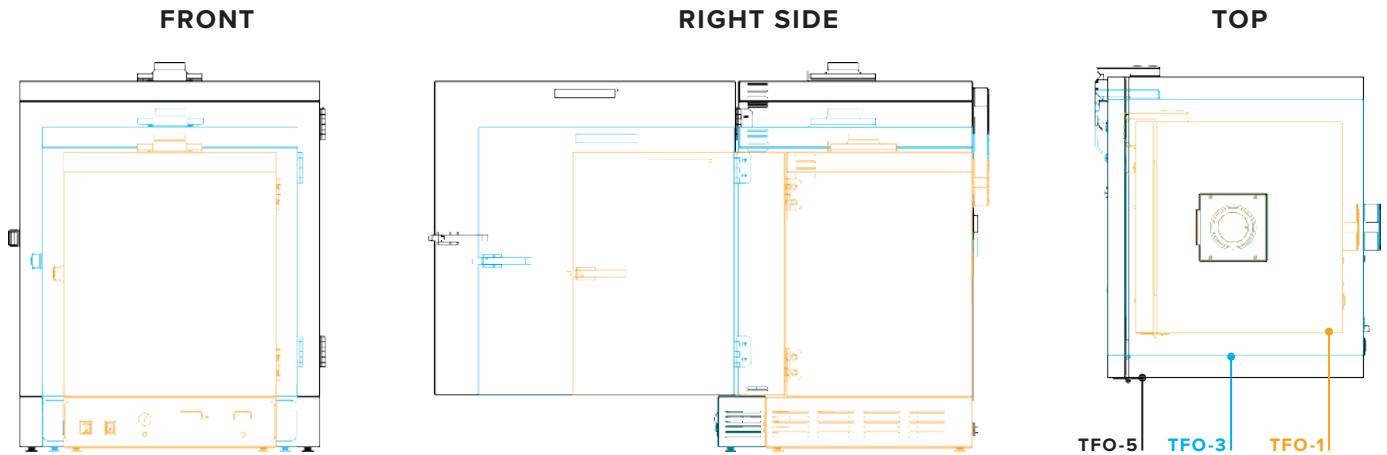
TFO-1



TFO-3



TFO-5



TFO Oven Options and Accessories

| | TFO-1 | TFO-3 | TFO-5 |
|---|--------------|--------------|--------------|
| Reverse Door | 907-952-0016 | 907-952-0017 | 907-952-0018 |
| 3" Rear Access Port Upgrade | 907-958-0001 | 907-958-0002 | 907-958-0003 |
| Caster Platform | N/A | 9000597 | 9000594 |
| Chart Recorder (Single Pen) | 6900535 | 6900535 | 6900535 |
| Chart Recorder (Dual Pen) | 6900008 | 6900008 | 6900008 |
| Chart Recorder (Honeywell 3-Channel Paperless) | 6900531 | 6900531 | 6900531 |
| Extra Shelf, Standard, Max. Weight 50 lbs (22kg); Includes Brackets | 9751227 | 9751228 | 9751229 |
| Extra Shelf, Reinforced, Max. Weight 75 lbs (34kg); Includes Brackets | 907-975-0001 | 907-975-0002 | 907-975-0003 |
| 485-USB Converter Communication Cable | 9900764 | 9900764 | 9900764 |
| Calibration of Single Component (NIST Traceable) | 9990840 | 9990840 | 9990840 |

Options must be specified when ordering. Contact Cascade TEK for additional custom inquiries.



CASCADE™

TEK



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