

LOW TEMPERATURE INCUBATORS



Low Temperature Incubators

The ToronCubator™ series is a comprehensive lineup of laboratory incubators designed to meet the full spectrum of controlled-environment research needs across pharmaceutical, life science, food safety, agricultural, and industrial testing applications. From compact entry-level units to flagship models with advanced connectivity and sub-zero humidity control, every incubator in this series is built around one principle: delivering stable, reproducible environmental conditions that laboratories across North America can depend on.

The ToronCubator™ portfolio covers four primary instrument categories — biochemical incubator, mould incubator, constant temperature and humidity, and full-range temperature-only chambers. Each category addresses a distinct set of research requirements, and each series within that category offers a tiered selection of control sophistication, programmability, and chamber volume. Whether a laboratory needs a straightforward 100 L laboratory incubator for daily microbiological work or a 1600 L climate chamber with LIMS connectivity and 10-year data retention for regulated pharmaceutical stability programs, there is a ToronCubator™ configuration built for that purpose.

All models share a consistent design philosophy: cold-rolled steel exteriors, mirror stainless steel interior chambers, adjustable shelving, and proven refrigeration components. Safety systems, alarm functions, and power recovery features are standard across the lineup, not optional extras. The result is a family of laboratory incubators where the step between tiers is a meaningful upgrade in capability — not just a change in aesthetics.

Applications

The ToronCubator™ series of incubators serves B2B laboratory environments across a broad range of industries and research disciplines. The portfolio is wide enough to address both routine daily workflows and specialized long-cycle protocols within a single product family.

- Pharmaceutical and Biotech : stability testing of drug substances, formulations, and biologics under ICH Q1A-defined temperature and humidity conditions. The humidity-controlled models are purpose-built for these protocols, with programmable multi-segment profiles supporting both long-term and accelerated study designs.

- Microbiology and Life Science Research; bacterial culture incubation, enzyme kinetics, cell-based assays, and metabolic studies conducted in temperature-stable laboratory incubators across the 4°C to 85°C operating range available within this series.
- Mould and Fungal Studies: the dedicated mould incubator models — including UV sterilization-equipped configurations — provide controlled thermal and humidity environments for fungal cultivation, spore viability studies, antifungal efficacy testing, and mycology research programs.
- Biochemical Research: multi-phase enzyme assays, temperature-gradient protocols, and metabolic pathway studies requiring programmable segment control and stable, unattended operation are well served by the biochemical incubator configurations in the ToronCubator™ lineup.
- Food Safety and Quality Control: spoilage microbiology, shelf-life evaluation, mould contamination testing, and fermentation trials across both temperature-only and combined temperature-humidity configurations.
- Environmental and Material Testing: humidity-sensitive aging, corrosion resistance testing, thermal cycling, and stress testing of electronics, polymers, packaging, and construction materials at defined temperature and RH setpoints.
- Academic and Institutional Laboratories: general-purpose incubators for multi-user research facilities, teaching laboratories, and shared-access environments where access control, data protection, and operational simplicity are equally important.
- Agricultural and Plant Science: seed germination trials, plant pathogen incubation, soil microbiology research, and tissue culture programs requiring repeatable, programmable temperature and humidity conditions over extended timelines.

Product Comparison Table

Product Code	Product Name	Category	Temp. Range	Humidity Control	Volume Range	Key Differentiator
ToronCubator™ BC-E	Economical Biochemical Incubator	Biochemical Incubator	5–50°C	No	100–250 L	Entry-level; PAMMA I control; 999h timer; power recovery
ToronCubator™ EH-P	Practical Electric Heating Incubator	Biochemical incubator	5–60°C	No	100–250 L	Frequency-conversion refrigeration; R134a; 6-stage fan; PMMA II

Product Code	Product Name	Category	Temp. Range	Humidity Control	Volume Range	Key Differentiator
ToronCubator™ SPLT	Stable Performance Low Temperature Incubator	Biochemical Incubator	4–70°C	No	100–800 L	30-seg/99-cycle programmable; screen lock; password protection; side test ports
ToronCubator™ MP	Programmable Mould Incubator	Mould Incubator	4–70°C	No	100–800 L	UV sterilization; 30-seg/99-cycle; fluorescent + UV chamber lighting
ToronCubator™ TH-P	Practical Constant Temperature Humidity Incubator	Temp & Humidity Incubator	4–60°C (dry) / 10–40°C (humid)	Yes (50–90% RH)	150–800 L	PAMMA II; ±0.5°C fluctuation; ±5% RH fluctuation; 30-seg/99-cycle
ToronCubator™ MU-P	Practical Laboratory Incubator with UV Sterilization	Mould + Humidity Incubator	4–60°C (dry) / 10–40°C (humid)	Yes (50–90% RH)	150–800 L	Humidity + UV; PAMMA II; non-CFC compressor; mould-focused dual control
ToronCubator™ TH-I	Performance Temperature Humidity Incubator	Temp & Humidity Incubator	4–70°C (dry) / 10–60°C (humid)	Yes (25–95% RH)	150–1600 L	BRIGHT I; 4.3" touchscreen; variable-frequency refrigeration; 5-year data storage
ToronCubator™ FH-X	Advanced Temperature Humidity Incubator	Temp & Humidity Incubator	-10–85°C (dry) / 10–60°C (humid)	Yes (15–98% RH)	150–1600 L	BRIGHT II; 7" touchscreen; USB/RS232/RS485; ±0.3°C; 10-year data storage
ToronCubator™ FT	Full Temperature Incubator	Temperature Incubator	4–70°C	No	150–1000 L	BRIGHT I; 5" touchscreen; 6-stage fan; USB + 2× RS-485; 10-year storage
ToronCubator™ MI-P	Performance Mould Incubator with UV Sterilization	Mould Incubator	4–70°C	No	150–1000 L	BRIGHT I; UV + fluorescent lighting; 6-stage fan; variable-frequency cooling; USB + RS-485

Quick Selection Guide

Not sure which model fits your application? Use this simplified guide:

- Temperature control only, entry-level budget → ToronCubator™ BC-E
- Temperature control with compressor refrigeration, mid-range → ToronCubator™ EH-P

- Temperature control with programmable profiles, no humidity → ToronCubator™ SPLT or ToronCubator™ FT
- Mould and fungal studies, temperature only, with UV → ToronCubator™ MP or ToronCubator™ MI-P
- Constant temperature and humidity, practical tier → ToronCubator™ TH-P
- Mould incubation with humidity and UV sterilization → ToronCubator™ MU-P
- Performance temperature and humidity, advanced connectivity → ToronCubator™ TH-I
- Flagship temperature and humidity, tightest tolerances, regulated environments → ToronCubator™ FH-X

Why Choose ToronCubator™ for Your Laboratory Incubator?

Laboratories evaluating incubators for B2B procurement typically have the same core concerns: performance consistency, data integrity, long-term reliability, and a product range broad enough to serve different departments without sourcing from multiple suppliers. The ToronCubator™ series addresses each of those concerns directly.

Consistent Performance Across the Full Range

Every laboratory incubator in the ToronCubator™ lineup — from the entry-level ToronCubator™ BC-E to the flagship ToronCubator™ FH-X — is built around the same core construction standards. Mirror stainless steel interior chambers, cold-rolled steel housings, and internationally sourced compressor components are consistent across all tiers. Performance specifications are verified, not estimated — fluctuation ratings, uniformity values, and humidity tolerances are traceable to the actual control systems in each model. Laboratories can move between tiers within the ToronCubator™ family and expect the same build quality, even when the feature set changes significantly.

A Tiered Portfolio Built Around Real Laboratory Needs

The ToronCubator™ series was designed to cover the full range of laboratory incubators that modern research and QC environments require — without forcing buyers to over-specify. The ToronCubator™ BC-E and ToronCubator™ EH-P address straightforward biochemical incubator needs at accessible price points. The ToronCubator™ SPLT and ToronCubator™ FT add programmability and connectivity for more demanding workflows. The ToronCubator™ TH-I and ToronCubator™ FH-X bring pharmaceutical-grade humidity control, variable-frequency refrigeration, and regulatory-compliant data management for regulated environments. Each tier is a genuine step up in capability, not a cosmetic change.

Data Integrity and Access Control as Standard Features

Across the mid-to-upper tier models, data storage, access control, and power recovery are built in — not sold as add-ons. Internal non-volatile memory retains program data for five to ten years depending on the model. Multi-level password management and screen lock timers prevent unauthorized parameter changes in shared laboratory incubators environments. Power recovery functions protect active incubation runs from data loss during electrical interruptions. For regulated environments — pharmaceutical QC labs, accredited testing facilities, GMP-adjacent manufacturing settings — these features directly support compliance readiness without requiring additional hardware.

Scalable Connectivity for Modern Laboratory Infrastructure

The mid-to-upper tier incubators in this series are designed to integrate with the systems laboratories already use. USB, RS232, and RS485 interfaces are standard on the BRIGHT I and BRIGHT II equipped models, enabling direct connection to LIMS platforms, data acquisition systems, and building management networks. Optional GPRS SMS alarm notification, online monitoring platforms, and embedded printers extend that connectivity further. For procurement teams managing multi-site laboratory operations, the ability to monitor every laboratory incubator centrally — without adding third-party hardware — has real operational value.

Purpose-Built Models for Mould and Fungal Research

Standard laboratory incubators are not optimized for mycology. The ToronCubator™ portfolio includes dedicated mould incubator configurations — the ToronCubator™ MP, ToronCubator™ MU-P, and ToronCubator™ MI-P series — that address the specific requirements of fungal and microbial growth studies. UV sterilization lighting, adjustable 6-stage fan speed to manage surface moisture conditions on culture media, and combined temperature-humidity control on humidity-capable variants make these models purpose-designed for mould incubator applications, not adapted from general-purpose designs.

North American Support and International Standard Compliance

The ToronCubator™ series is specified and supported for the North American market. Products are designed in alignment with IEC 61010-1, ISO 9001:2015, UL 61010-1, and applicable ICH stability testing guidelines. Pharmaceutical-relevant models reference 21 CFR Part 11 compliance readiness for electronic records and access control architecture. Buyers can evaluate the ToronCubator™ lineup against the same compliance frameworks used for any other regulated laboratory



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 

Phone: +971 488 19252
Email: me@torontech.com

