



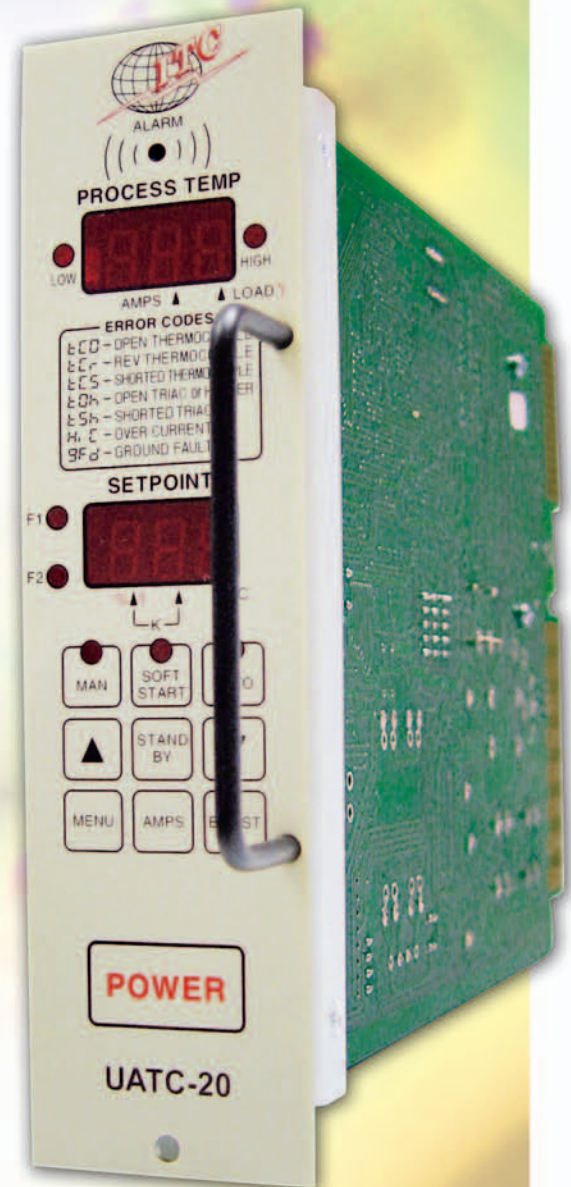
# UATC-20 Temperature Control Module

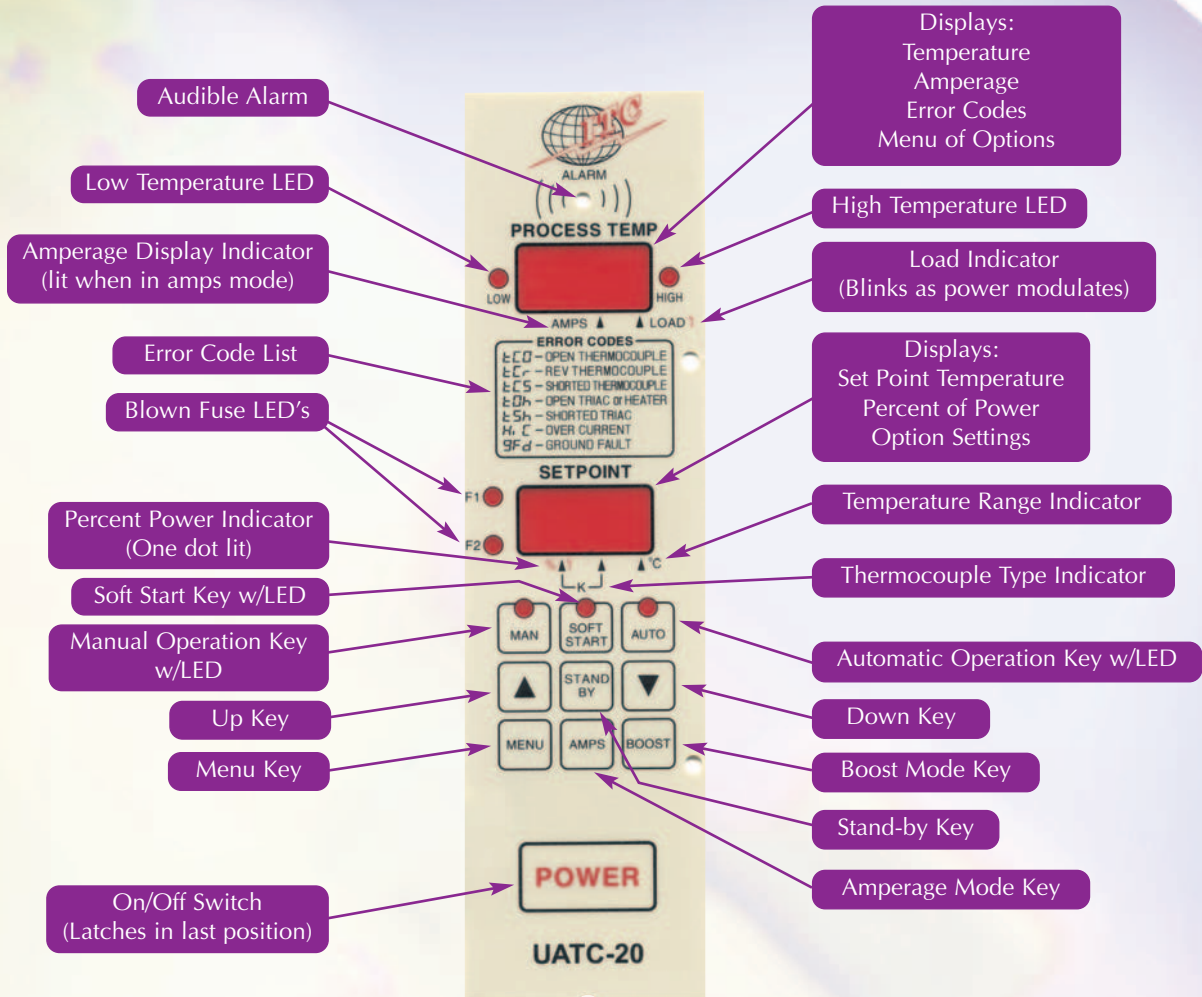
Tomorrows Temperature Control Module Today

The UATC-20 Temperature Control Module has been designed with the latest in microprocessor technology for Hot Runner Applications where state-of-the-art operational and diagnostic features are a requisite. There are many little features, such as gold-plated edge connector, incorporated within the UATC-20 which greatly enhances its operation. The UATC-20 is a rugged, simple to set-up and easy to use module which is versatile enough to move from project to project, with all the sophistication necessary for today's demanding molding requirements.

Some of the exceptional analytical functions found on the UATC-20 are:

- A diagnostic snapshot of the heaters operating characteristics are revealed when the current sensing feature is employed.
- Detects and alerts to the potentially dangerous condition of current leaking to ground.
- If power to the heater exceeds a selected value, the module will alarm and disables power to the heater preventing damage.
- Advance circuitry detects alarms and disables power to the heater in the event the triac fails in a shorted condition.
- In the event of a Thermocouple, Open or Shorted condition, the module will automatically go into APO (Average Power Output) mode, allowing operations to continue by providing the same average power to the heater as applied prior to the failure.
- Control algorithms are by means of our Adaptive-auto-tuning PID or FUZZY logic which makes intelligent control decisions and minimizes electrical stress on the heaters.
- Real time diagnostics fault detection & display.





## ENHANCED DIAGNOSTIC FEATURES:

- Ground fault detection (selectable range)
- High amperage alarm (selectable range)
- Thermocouple - open, shorted & reversed alarm
- Triac - shorted & open alarm
- Heater open alarm
- High and low temperature alarm
- Blown fuse indicators

## SAFETY FEATURES

- High voltage thermocouple protection (fused)
- Module high current protection (fused)
- Power disabled to heater:
  - Triac shorted
  - Triac open
  - Heater open
  - Over temperature
  - High amperage
- Audible alarm (selectable on/off)

## FEATURES:

- All functions & parameters are fully selectable from the "menu" feature on the keypad
- Amperage measurement & display
- Percent of power display (selectable range)
- Automatic or manual operation
- Automatic soft start
- Anti-arcing
- Boost (selectable temperature & time)
- Standby
- "F" or "C" temperature ranges
- Type "J" or "K" thermocouple
- Selectable control method – Adaptive-auto-tuning PID or Fuzzy Logic
- Panel lock out (selectable on/off)
- Electrically Isolated Front Panel
- APO (average power output) for T/C failure conditions
- Automatic test of LED segments
- Operating voltage 240V, 50/60 Hz or 120V
- Cold junction compensation
- Zero crossing triac
- This module operates both of our 15 and 30 main frames

**International Temperature Control, Inc.**  
 2415 E. Huron - P.O. Box 805  
 Au Gres, MI 48703 USA

Tel. (989) 876-8075  
 E-Mail sales@itc-controls.com

Fax. (989) 876-6640  
 www.itc-controls.com