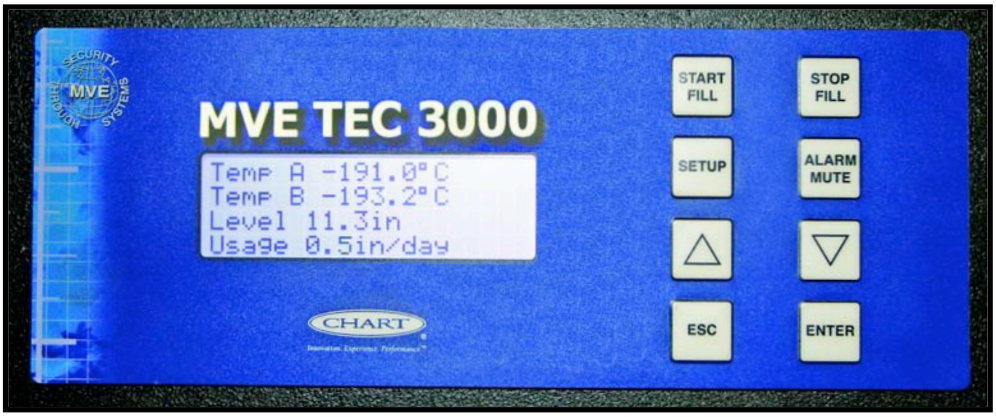
TEC 3000



The TEC 3000 employs a variety of advanced features that enable the controller to monitor and control the environment inside a freezer with a high level of precision.

Features/Options:

- Liquid Nitrogen Level Measurement
- Automatic Liquid Nitrogen Level Control
- Two Channel Temperature Measurement
- Multiple-use Adjustable Alarms
- Adjustable Security / Password System
- One Fill All Capability (Sequential or Simultaneous)
- Timed Filling
- Battery Backup (Optional)
- Gas Bypass (Optional)

Technical Specifications:

- **Level Measurement**
  - Sensor Type - Dual Port Pressure Transducer Measurement Accuracy +/- .5 in; +/- 13 mm (typical)
  - Liquid Usage Feature
  - Two Point Calibration Feature

- **Level Control**
  - Range 3–48” (76-122 mm)
  - Control Output - (Fill Solenoid Valve)
  - 24 VDC, 1.0 amp (max)

- **Temperature Measurement**
  - Two Sensors, Platinum RTD - Two wire element
    - Accuracy +/-2.0°C Full Scale
    - Altitude Compensation For Accuracy
    - Full Range Calibration Feature
    - Probe Heater For High Temp Alarm Testing

- **Front Panel Display**
  - Backlit LCD Readout, 4 row x 20 character
  - Level Display - in, mm, %
  - Temperature Display - °C, °F, or K

- **Standard Alarms**
  - Alarm Conditions
    - Low Level Alarm
    - High Level Alarm
    - Low Temperature (Probe A & B)
    - High Temperature (Probe A & B)
    - Fill Time Alarm
    - Power Failure (remote only)
    - Lid Open Alarm
    - Usage Warning and Alarm
    - Temperature Calibration Alarm (Probe A & B)

- **Optional Alarms**
  - Bypass Sensor Failure
  - Bypass Time
  - Bypass Sensor Calibration
  - Power Failure (audible, visual and remote alarms)
  - Low Battery Voltage

- **Alarm Output**
  - Both Visual and Audible Alarms
  - One Global Remote Alarm Relay
  - Four Discrete Remote Contacts
    - Temp A High
    - Low Level
    - High Level
    - Low Battery (optional when equipped with battery backup)

- **Controller Features**
  - Communication Interface: Serial Communication RS485/ASCII/MODBUS
  - Memory: Stores time and date stamped information on the controller’s 30,000 most recent events