

## OTC, OTM and OTI Series Options

Audible Alarm w/silence (AA1) .....	2
Anti Drain-back Valve (AD1 or AD2) .....	2
Alarm Beacon (AV1) .....	2
Auto Water Make-up (AWM) .....	2
Balancing Valves .....	2
Uncontrolled DI Loop (D01) .....	2
Controlled DI Loop (D02) .....	2
Enhanced Temp Control (EC1, EC2, EC3, EC4) .....	3
Flow Meter w/ Digital Display (FS1) .....	3
Heater Package (HT1) .....	3
Low Flow Indicator (LF1) .....	3
Low Water Indicator Lamp (LW1) .....	3
Manifolds (MA1) .....	3
CE or UL Certification (NR1, NR3, NR4) .....	3
Outdoor Package (OD1) .....	4
Particle Filters .....	4
Pressure Gage (PG1 or PG2) .....	4
pH Control Loop (PH1) .....	4
Pressure Transducer w/ Digital Display (PT1) .....	4
Remote Control Tether (RC1) .....	5
Remote Condenser Option (RCX) .....	5
Remote Start/Stop (RS1) .....	5
Remote Temp Sensing (RT1) .....	5
Sound Reduction Package (SR1) .....	5
Temp out of Tolerance Alarm Contacts (TA1) .....	5

**Audible Alarm w/silence (AA1)**

The audible alarm feature allows you to link a number of alarm conditions in series to the audible alarm output. Any alarm condition would then signal the alarm to sound, thus signaling the operator.

**Anti Drain-back Valve (AD1 or AD2)**

The anti drain-back valve package allows for the unit to operate with overhead piping systems without overflowing the fluid reservoir. Once power is removed from the chiller, a solenoid valve and check valve are used to stop the back-flow of fluid from an overhead piping system and protecting the reservoir.

**Alarm Beacon (AV1)**

The alarm beacon feature allows you to link a number of alarm conditions in series to the alarm output. Any alarm condition would then signal the alarm beacon to light, thus signaling the operator.

**Auto Water Make-up (AWM)**

The auto water make-up package includes an external fluid supply, hose, reservoir float, and solenoid valve. The additional reservoir float triggers the solenoid valve to close when the internal reservoir is at full capacity. The low water float signals to open the solenoid valve, allowing additional water to flow into the closed loop system. This is a benefit to customers whom have limited access to their unit and the unit experiences fluid losses between process runs.

**Balancing Valves**

Balancing valves are incorporated on the outside of the unit. They allow for the capability to control the flow to your process. If the pump capacity is greater than the process flow requirement, a balancing valve will ensure that the proper flow can be adjusted into spec.

**Uncontrolled DI Loop (D01)**

The uncontrolled DI loop option provides a ball valve, conductivity sensor w/ light indicator and mixed bed filter. This system passively polishes your DI water by physically adjusting the ball valve to control the flow thru the DI polishing loop.

**Controlled DI Loop (D02)**

The controlled DI loop option provides a pump or solenoid valve, conductivity sensor, conductivity board strainer and mixed bed filter to be used to actively polish your DI water. The active system allows for polishing to occur when needed; however it does not polish when it is not needed. The advantage to an active polishing system is that it extends the life of your mixed filter cartridge, which reduces the amount of waste.




### Enhanced Temp Control (EC1, EC2, EC3, EC4)

The enhanced temp control feature allows the end user to read and write to the Love temp control from a remote location. This feature is popular when the unit is located somewhere where access to the control panel is limited or not accessible during normal operation.

### Flow Meter w/ Digital Display (FS1)

Flow meters are used to ensure proper flow in the process fluid system. The process flow is critical, when considering the heat transfer ability of the braze plate chiller evaporator or heat exchanger. The digital display can be used to provide a contact closure when the flow is below the minimum required flow.

To adjust the flow meter alarm:

- Use the up or down   arrows to adjust the low flow set-point. The LED light should flicker.
- Push the enter key  to confirm the set-point. The LED light should turn on solid.

### Heater Package (HT1)

Heaters are used to allow the unit to both heat or cool your process fluid. The feature is very helpful when operating at temperatures above ambient air temp. The heat allows for quick set-up processes to reach their specified temp in a much faster time.

### Low Flow Indicator (LF1)

The low flow indicator includes a flow switch and panel indicator to warn the operator of a low flow condition. This is an inexpensive option for customers to verify that their process receives the correct flow to provide for heat transfer. This option provides a contact closure to signal an audible alarm (optional) or alarm beacon (optional).

### Low Water Indicator Lamp (LW1)

The low water indicator option provides an additional reservoir float and panel indicator to warn the operator of a low water condition in the fluid reservoir. This option provides a contact closure to signal an audible alarm (optional) or alarm beacon (optional).

### Manifolds (MA1)

Manifolds are typically used where there are multiple inlet and outlet ports on your process side. The manifold package allows includes a factory installed manifold mounted on the back of the unit.

### CE or UL Certification (NR1, NR3, NR4)

Due to local regulations, some end users require CE or UL certifications. Our unit certification options allow the end user to meet their requirements and receive a compliant unit right from the factory.

### **Outdoor Package (OD1)**

The outdoor package feature allows the unit to be run in conditions outside of the typical 32 to 100°F temp range. This feature includes compressor heaters, NEMA 4 (water proof) electrical enclosure upgrade, all metal fittings, a totally enclosed fan cooled pump and an electrical box heater. These provisions allow for an OPTI TEMP unit to safely operate in an outdoor environment.

### **Particle Filters**

Particle filters are used to maintain a clean process fluid loop. They can be sized 5 to 50 micron particle size (30 micron typical) for your specific process. This filter provides dual protection for the braze plate inside your unit for your process micro channels. Particle filters capture scale materials caused by galvanic corrosion, hard water and micro bacteria.

To change out the particle filter:

- Ensure the unit is turned off
- Relieve the pressure in the filter by pushing the red button (when present)
- Unscrew the filter housing bowl from the filter
- Dispose of the process fluid
- Remove and replace the particle filter
- Re-attach the filter housing bowl back onto the threaded mounting top
- Re-start your unit

### **Pressure Gage (PG1 or PG2)**

The pressure gage feature allows the end user to monitor the fluid pressure on a constant analog gage, located on the front panel of the unit. The gage material is consistent with the wetted construction option of choice.




### **pH Control Loop (PH1)**

The pH control loop provides everything necessary to actively polish the water system. This option includes a pH controller, pH sensor, solenoid valves and anion/cation filters. The user can then adjust the desired pH level and this system option will complete the task of adjusting and maintaining the specified pH.

### **Pressure Transducer w/ Digital Display (PT1)**

The pressure transducer is used to verify proper pump fluid pressure. This option comes in helpful when your process micro channels have high pressure drop or pressure monitoring is important due to fragile process equipment. This option provides a contact closure to signal an audible alarm (optional) or alarm beacon (optional).

To adjust the pressure transducer alarm:

- Use the up or down   arrows to adjust the high or low pressure set-point. The LED light should flicker.
- Push the enter key  to confirm the set-point. The LED light should turn on solid.

### **Remote Control Tether (RC1)**

The remote control tether package is useful to end users that require control and monitoring from a remote location and do not wish to incur the added expense of a computer. This option provides a remote box for indicator light faults and temp control adjustment and readings. It is a cost prohibitive option to remote temp reading and writing, where there is not an available computer.

### **Remote Condenser Option (RCX)**

The remote condenser option is used when the condenser heat needs to be discharged outdoors, away from the process. This option is also used when explosion proof certification is required. The remote condenser feature removes the air cooled condenser from the unit and allows the user to place it at some remote location.

### **Remote Start/Stop (RS1)**

The remote start/stop option is important to end users that require the ability to turn on or off the unit from a 24 V signal. It is a key feature if your application does not allow you to access the unit's front control panel during normal operation.

### **Remote Temp Sensing (RT1)**

The remote temp sensing feature allows the unit to determine the coolant temperature based from a remote reservoir. This feature is highly important when your process requires a very specific fluid temp at a remote reservoir location.

### **Sound Reduction Package (SR1)**

The sound reduction package includes solid side panels, noise reduction insulation and additional cabinet fan to lower the noise level of the unit. This option is only available for the water cooled chillers or water to water heat exchangers.

### **Temp out of Tolerance Alarm Contacts (TA1)**

The temp out of tolerance alarm contacts are a wiring feature that allows the temp control to provide a dry contact signaling a temp out of tolerance condition. The feature allows the end user to monitor the temperature of their process and send an alarm if the temp drifts outside of the tolerance band.