Thermal solutions for laser applications.
Introducing the Intelligent Laser Cooling System (iLCS).

An innovative way to cool laser applications.

The idea was to develop an integrated cooling solution to improve the performance of high-powered lasers. We deliver smart technology, improved uptime, and a reduction in your overall footprint to offer a cooling system so efficient you won’t even know it’s running.

Chillers and lasers make a great team.

Lasers produce heat. Chillers remove heat. Together the two achieve three goals:

- Maintain precise laser wavelength and higher output efficiency
- Achieve desired beam quality
- Reduce thermal stress on laser system

Choose from a full range of sizes to meet the cooling needs of all laser systems.
Built for performance.

- Variable capacity control for high efficiency
- Precise and independent control for fluid temperatures
- Smart technology for improved uptime
- Quiet and easy operation
- Custom colors and private labeling
- Single, double, and triple circuit designs
- 50/60Hz

Designed to solve challenges.

Provide consistent cooling.
- The amount of wasted heat that must be removed can fluctuate with the cutting process and the types of material.
- Staged compressors allow for flexible cooling to meet the varying demands of the heat loads while extending the life of the compressors with even wear on the components.

Eliminate downtime.
- Efficient flow and pump operation effectively cool resonators for efficient operation.
- Sensors monitor reservoir levels and process flow rates to prevent pump failures.
- The elimination of a bypass valve allows for easy operation and maintenance.
- Alerts issued through the remote monitoring system when problems are detected allow for preventive maintenance before downtime strikes.

Lessen noise and heat.
- Fans provide minimal energy consumption while providing scalable cooling efforts.

Decrease interruptions.
- Remote monitoring and control ensures that the chiller will operate without failure.
- The smart system interfaces seamlessly, offering easy usage and maintenance.

Reduce discrepancies.
- Motorized hot gas bypass couples with staged compressor capacity to maintain narrow temperature thresholds.
- Uses smaller footprint for more efficient energy usage.

Condense operations.
- Chillers are designed for minimum disruption to the laser process.
- Seamless integration minimizes the machinery’s footprint to offer more process and physical efficiency.

Avoid cartridge failure.
- Water conductivity monitoring reduces deionized cartridge failure.
- Sensors continuously monitor and actively control a solenoid value with filter to control prescribed levels.
- Filter life is extended, minimizing erosion of components.
At home on three continents.

Our promise.

Your investment in our Glen Dimplex Thermal Solutions equipment is backed by 24/7, unparalleled global service and support.

Our products built in our ISO-9001 certified facility use high quality components, backed by an 18-month warranty that redefines industry standards.

If your equipment needs installation, trust Glen Dimplex Thermal Solutions’ knowledgeable technical service team for assistance. Service packages are available for all systems to assist with start-up and preventive maintenance – all to avoid costly downtime.