

Ice Bear 40

Thermal energy storage (TES) and air conditioning solutions for commercial and industrial buildings



The Ice Bear 40 is an intelligent, distributed ice battery for 3 to 20 ton commercial air conditioning units. During off-peak hours, it stores cooling energy by freezing water in an insulated storage tank while the conventional AC provides cooling as needed. During peak hours, ice-chilled refrigerant circulates from the Ice Bear 40 to the air conditioning system, eliminating the need for energy-intensive compressors.

Efficient: Reduces typical peak cooling load by 95% and delivers 100% round-trip efficiency.

Reliable and cost-effective: Designed to last 20 years, each unit only requires a one hour annual maintenance procedure. By eliminating stop-start operation during the hottest hours of the day, it also extends the AC compressor life.

Versatile: Fully compatible with commercial rooftop and split systems from 3 to 20 Tons, and ductless units from 3 to 5 Tons.

Easy to install: Integrates seamlessly with packaged or split AC units. Can be installed on the roof or ground by an Ice Energy certified local AC contractor.

Green: Lowers CO₂ emissions by up to 10,000 pounds per unit per year without generating any hazardous waste.

Ice Bear Advantage for Utilities

- Manages AC load and relieves congestion on peak with the award-winning CoolData® Controller
- Cost-effective alternative to new peaking generation, transmission and distribution investments
- Improves system efficiency and grid reliability
- Enables reliable integration of renewables
- Reduces greenhouse gas emissions
- Easy, rapid deployment at a multi-megawatt scale
- Creates local economic development opportunities

Ice Bear Advantage for Businesses

- Significantly reduces peak demand and increases energy efficiency
- Reduces air conditioning bills by up to 30%
- Greatly reduced system cost with rebates and utility incentives
- Extends life of AC system by up to 5 years
- Reduces building carbon footprint by 10% or more
- Delivers superior cooling comfort
- Stores excess solar generation