



Platform for
On-Site Energy
Valve Optimization.

Belimo Clear Edge™



Discover the advantages:
www.belimo.us



Improve your Building Performance

The Belimo Clear Edge is an analytical device that leverages the data from all installed Energy Valves in a BACnet Building Automation System (BAS).

The Clear Edge automatically analyzes the Belimo Energy Valve data to optimize, manage, and monitor key performance indicators of water coil performance and hydronic energy consumption. The Clear Edge offers trending capability with automated Delta T setpoint adjustment to increase system performance and energy savings strategies. An internet connection is not needed.

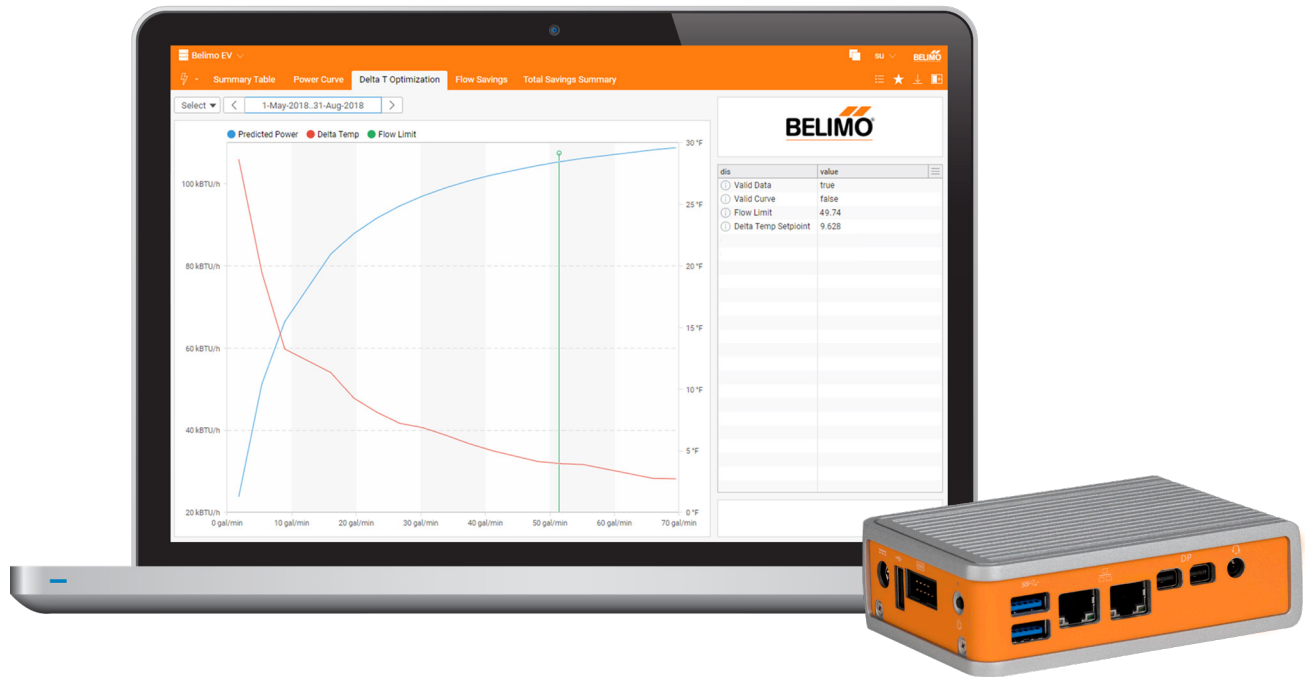
Software licenses are pre-loaded based on the number of Energy Valves in a building. For example, if there are twelve Energy Valves installed, the best value is the 20 license unit, model number ESL020. Additional licenses can be purchased in increments of 5 or 20. The Belimo Clear Edge technology is also available as a plug-in for SkySpark from Stackhub (www.stackhub.org).



BELIMO CLEAR EDGE DEVICE SPECIFICATIONS

- Processor: Intel Celeron N3350 1.10 GHz
- Memory: 4 GB LPDDR4
- Memory Speed: 2133 MHz
- Storage: 32 GB eMMC storage
- Connectivity: 1 GB LAN Port
1 GB Service Port
- DC input jack 12V AC/DC
(power adapter included)

	Model #	Description
Belimo Clear Edge	EAP005	5 licenses
	EAP020	20 licenses
	EAP050	50 licenses
Additional Licenses	ESL005	5 licenses
	ESL020	20 licenses



Features and Benefits



Aggregated start screen of building

A tabular display of all installed Energy Valves offers a simplified view of Key Performance Indicators (KPI's) including BACnet object name, instance number, supply and return temperatures, Delta T, delta setpoint, flow, current energy usage, and 30 days of energy consumption.



Coil power and Delta T curves

Scatter plots that automatically generate load profiles and flow saturation points of coil characteristics and Delta T performance.



Energy dashboard

Dashboard to input cost and kWh data, pump efficiency, and other building specific variables to provide aggregated cost and energy savings as the result of reduced pumping. Reporting is available by day, month, quarter, and year.



Setpoint configuration

Change parameters on installed Energy Valves individually or collectively. For example, you can change multiple flows and Delta T setpoints at once for winter to summer seasonal changeover.



Automatic and continuous Delta T optimization

Software analytics provide the optimal Delta T and flow setpoints, which are automatically written to the Delta T Manager to save time and improve efficiency.



Automatic discovery

All Energy Valves on a BACnet network can be discovered with a single click. Point mappings are created automatically ensuring that Clear Edge has the required data to provide fast and easy analysis and optimization.

Increasing Energy Savings

Delta T Optimization

The charts illustrate the optimization provided by the Delta T Manager. Figure 1 depicts the baseline operation with a flow range up to 55 GPM to serve 100 kBTU/h. Figure 2 is the same coil with the Delta T Manager enabled. The coil is able to satisfy the 100 kBTU/h load with only 35 GPM. This provides a higher Delta T for the chilled water plant with a 36% savings on the pumping system.

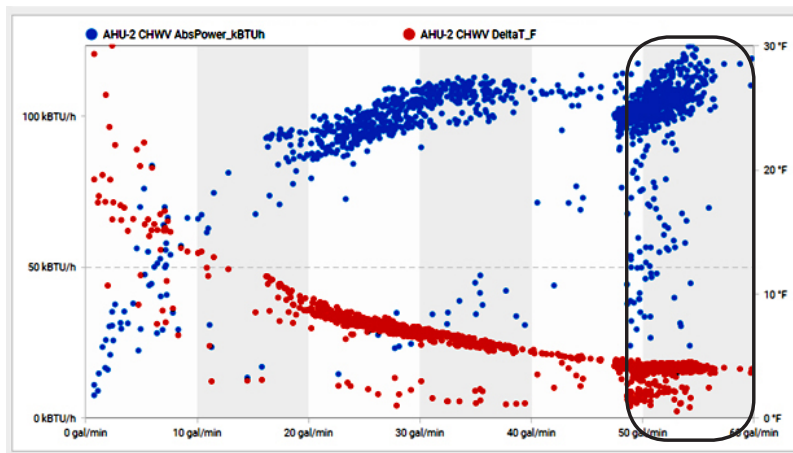


Figure 1

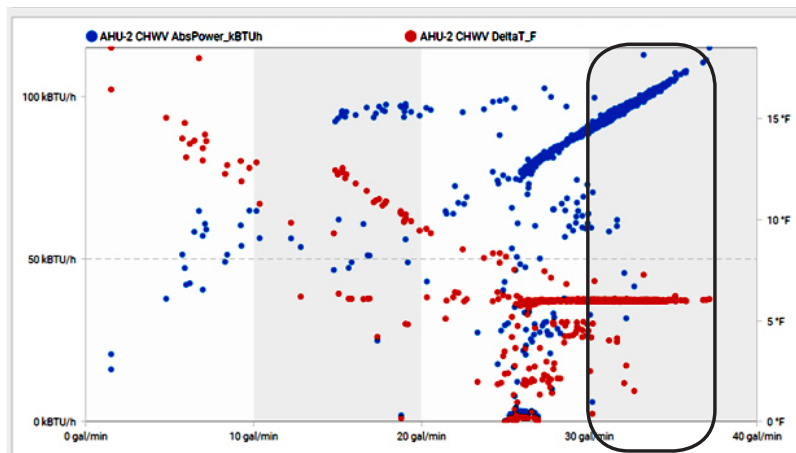


Figure 2

Belimo Americas

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