

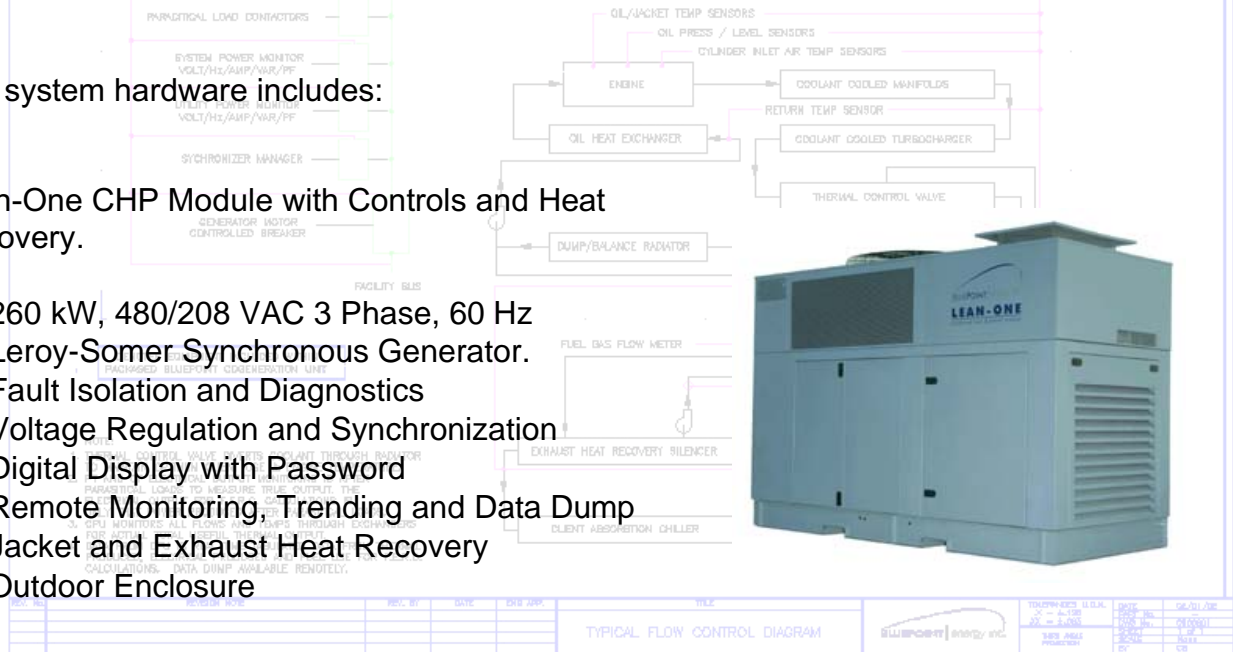
## Integrated Cooling, Heating & Power System

The BluePoint Energy/ICHM CHP system is a modular pre-engineered, prefabricated IC engine based cooling, heating and power plant. The system incorporates BluePoint's packaged natural gas generator with high temperature heat recovery and a packaged ICHM (integrated cooling and heating module) consisting of a YORK absorber and all required accessories. Pre-engineered for optimum performance and prefabricated for reduced installed cost, the system provides unparalleled reliability and serviceability. The generator, heat recovery and absorption system controls are integrated for seamless interoperability and to provide a single connection to the building automation and monitoring systems. This unique approach combines the resources of the engine and thermal manufacturers in a cooperative effort on design, service and maintenance.

The system hardware includes:

Lean-One CHP Module with Controls and Heat Recovery.

- 260 kW, 480/208 VAC 3 Phase, 60 Hz
- Leroy-Somer Synchronous Generator.
- Fault Isolation and Diagnostics
- Voltage Regulation and Synchronization
- Digital Display with Password
- Remote Monitoring, Trending and Data Dump
- Jacket and Exhaust Heat Recovery
- Outdoor Enclosure



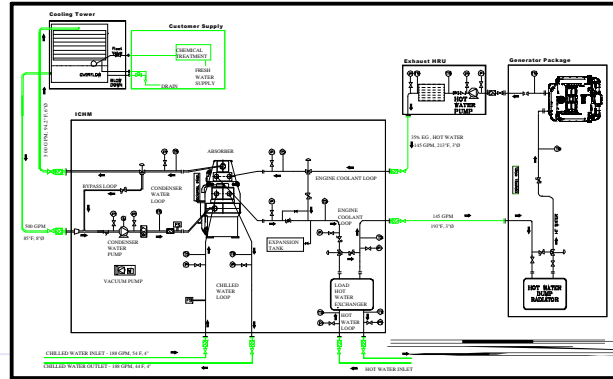
Integrated Cooling and Heating Module

- 78 Tons or 1,400 MBH Hot Water
- YORK<sup>®</sup> Hot Water Absorber
- Heat Exchanger
- Detached Cooling Tower
- Pumps, Piping and Valves
- Integrated Controls with Generator
- Outdoor Enclosure



**Ultra Lean.  
Ultra Clean.**  
Cogeneration  
for the next generation

The units are provided as outdoor skid-mounted modules that are placed on a level foundation and require minimal installation work. The BPE 260 module and ICHM are designed to operate together, have a single power and control connection and are provided with flanged connections to the various hydronic circuits.



Both systems are thermally balanced and incorporate high temperature heat recovery for maximum absorber performance. Accessory items including safety controls, heat exchangers, cooling tower, pumps, valves, sensors and controls are integral with the system and are designed for high reliability and superior functionality. The pre-engineered system considerably reduces engineering, installation and commissioning costs and provides quality performance.

The BluePoint Lean-One 260 kW module is an ultra-clean IC Engine utilizing exhaust gas recirculation combined with precise fuel-air ratio control and catalyst to meet the strictest emission requirements. The on-board heat recovery system incorporates exhaust heat and is optimized for absorption chiller performance.

The ICHM is a pre-engineered, prefabricated absorption chiller machine room. The ICHM control system integrates the absorber, load heat exchanger, cooling tower and accessories with the engine. The ICHM provides simultaneous heating and cooling for maximum thermal load factor.

Performance:	BPE260 w/ ICHM	2 x BPE 260 w/ ICHM
Fuel Input	2,774 MBH	5,548 MBH
Electric Output	260 kW	520 kW
Electric Efficiency LHV	32%	
Heat Recovery	1,350 MBH	2,700 MBH
CHP Efficiency	81%	
Coolant Outlet Temp	217 F	
Chiller COP	0.7	
Cooling Capacity	78 Tons	156 Tons
NOx @ 15% O2	< 0.14 lb/MW-hr	
CO	< 0.47 lb/MW-hr	
VOC	< 1.8 lb/MW-hr	