



In commercial buildings, HVAC is by far the most energy intensive system, accounting for a significant proportion of the total energy consumption.

For this reason every efficiency improvement in HVAC performance can significantly reduce the energy profile of the building, turning HVAC optimisation into a value generating opportunity.

Created with an in-depth understanding of all thermodynamic variables involved in managing plant room HVAC equipment, PlantPRO enables optimum control of every device and its integration into a single synergistic system. Importantly, this approach provides significant energy savings, with verified case studies of up to 40% energy savings.

PlantPRO is trusted by major chiller equipment manufacturers globally as their own OEM chiller plant control and optimisation solution.

PlantPRO® is an award-winning plant room optimisation and control software developed by Conserve It. It provides control of the chiller plant system in a way that delivers efficiencies beyond that of the individual components.

PlantPRO uses feedback from its on-board real time analytics, diagnostics, measurement and verification systems to continually readjust the chiller plant for optimal performance.

PlantPRO's smart machine learning engine accurately builds analytical models of equipment operating profiles to allow for optimisation of the chiller plant performance beyond what was previously possible.

PlantPRO was named Product of the Year at the 2015 AIRAH Awards and was awarded Energy Savings Solution Product of the Year at the 2017 Control Trends Awards.

PlantPRO is deployed across six continents, 20 countries and 50 cities around the world covering over 2 million square metres of building space.

PlantPRO 2.0 features a data rich, automatically generated HTML5 user interface. End users can access PlantPRO via desktop, tablet or mobile web browsers.

The PlantPRO user interface allows the end user to view live plant data, compare chiller performance, chart historical data, view active and past alarms. In addition, if required manual control can be undertaken through the PlantPRO plant manager page.

Advanced Self Learning Algorithms based on ASHRAE Study



Plant Performance Monitoring



Plant Measurement and Verification



Plant Diagnostics and Reporting



Plant Control and Automation



Plant Optimisation



Plant Continuous Commissioning and Tuning

Product Name	PlantPRO (Acronym for Plant Performance Reliability Optimisation)	
Developer	Conserve It	
Summary of features	<p>Advanced staging algorithms</p> <p>Smart Sequencing</p> <p>Chiller & plant analytics</p> <p>Feature rich HTML5 user interface</p> <p>Chilled water temperature optimisation</p> <p>Condenser water temperature optimisation</p> <p>Pumping and distribution optimisation</p> <p>Optimised cooling tower control strategies</p> <p>Chiller control & optimisation</p> <p>Alarming</p> <p>Automated monthly reports</p>	
Applicable plant type	<p>Support for Primary and Condenser Pumps</p> <ul style="list-style-type: none"> · Dedicated Pump Configuration · Headered Pump Configuration · Lead-Lag Pump Configuration <p>Support for Primary CHW circuit</p> <p>Support for Primary HW circuit</p> <p>Support for Condenser water circuit</p> <ul style="list-style-type: none"> · Single condenser water circuit · Multiple condenser water circuits <p>Support for Secondary Pumps</p> <ul style="list-style-type: none"> · Single secondary circuit · Multiple Secondary Circuits <p>Support for Cooling Tower systems</p> <ul style="list-style-type: none"> · Single cooling tower · Multiple headered cooling towers · Multiple dedicated cooling towers <p>Support for chillers</p> <ul style="list-style-type: none"> · Air cooled or water cooled · Any brand · Series or parallel configuration · New or existing 	
Chiller brand compatibility	Any chiller brand (e.g. Multistack, Mitsubishi, Daikin, Trane, York, Carrier, PowerPax/Smardt + all other brands)	
Communication protocol compatibility	BACnet IP, BACnet MSTP, Modbus TCP, Modbus RTU, LON IP, encrypted FOX protocol (Niagara), OPC + more	
Applicable sectors	Shopping centre, commercial, university, industrial, hotels, casino, medical facilities, warehousing, government facility, smart cities, airport, marine application + more	
Web user interface technology	Accessible via standard web browser without need for proprietary tools. Desktop, mobile and tablet access. Secured by HTTPS protocol User access level control. Read only access for general user, operator access for plant manager user, engineering access for commissioning user.	
Hardware platform	<p>CI-DEG-3000</p> <p>IntelR Atom™ E3815 1.46 GHz / 512 KB + 400 MHz GPU</p> <p>2 GB, DDR3L – 1066 MHz</p> <p>2 x 10/100 Fast Ethernet (RJ-45)</p> <p>USB: 1x USB 2.0, 1x USB 3.0</p> <p>24VDC + PoE</p> <p>WLAN, Bluetooth LE 4.0, WWAN/Cellular</p> <p>12.5x12.5x5.1cm foot print</p>	<p>CI-534</p> <p>1GHz AM335x ARM Cortex A-8 Processor</p> <p>4G eMMC Flash Memory</p> <p>10/100 Mbps Ethernet (2), RS-485 (2), USB (2)</p> <p>24VDC</p> <p>10 Digital Outputs</p> <p>8 Analog Outputs</p> <p>16 Universal Inputs</p> <p>11.4x10.8x5.7cm foot print</p>
Software platform	PlantPRO 2.0 software, developed by Conserve It Niagara N4 framework, developed by Tridium	