



MACH-PROAIR™
Soaring High with an Addition

SPACE-SENSOR™ ENOCEAN®
902 MHz is Making a Wave



www.reliablecontrols.com

RUNtime

The Official Quarterly Newsletter of Reliable Controls® Corporation

Q4 - 2015

GEN4 : the Next Evolution



Member of
BACnet
International



Reliable®
controls

GEN4 : THE NEXT EVOLUTION

Elevating your online user experience.

Reliable Controls has launched a complete re-design of its public-facing online experience.

Along with a more contemporary design, changes have been made to the site-wide navigation to help you find the information you need faster.

The new website rolls out the first phase of a fourth generation design and features a substantially improved user experience on all devices including: smart phones, tablets, workstations, and wide screen displays.

The GEN4 site introduces new capabilities like responsive design, enhanced search, and database driven content, so you can find what you want when you need it.

Simplicity, flexibility, and sustainability are the design hallmarks of Reliable Controls. You can count on a quality feature-rich Internet experience from the people and technology you can rely on.



"Our goal is to earn, through our actions and through the quality of our products and processes, the reputation and brand recognition of having the most satisfied dealers and end-users in our industry."
Roland Laird, President

In this fast moving information age, Reliable Controls is committed to maintaining an effective and efficient online user experience. You have wisely partnered with a growing international corporation that is committed to long-term performance and total customer satisfaction.

SPACE-SENSOR™ ENOCEAN® AND ACCESSPOINT

Pushing the boundaries and sharing the benefits of EnOcean® wireless technology.

In today's climate-focused world society is moving towards energy harvesting to help with our daily tasks. ReliableControls® participates in this goal with its energy harvesting wireless EnOcean technology.

Now available in three variations the Reliable Controls SPACE-Sensor EnOcean (SSE) and the SMART-Sensor EnOcean Accesspoint (SSEA) products continue to grow. All models are equipped with a dedicated linear active thermistor and are available in 315 MHz, 868 MHz, and now 902 MHz frequencies.

With EnOcean wireless technology, sensors can harvest their own energy using onboard photovoltaic cells and light switches can generate power from the mechanical energy absorbed by toggling the light switch itself. Very smart!



SSE with energy harvesting photovoltaic cell

FEATURES

- Two-way wireless interface, allows the SSEA to transmit wireless control packets to and receive wireless status packets from qualified third-party EnOcean output devices.
- Compatible with EnOcean RPS wireless switches single rocker, dual rocker, and key card variants.
- Compatible with door/window sensors using the EnOcean 1BS message type.
- Generic learn of 4BS wireless controllers and sensors.
- Able to act as a repeater of EnOcean wireless packets.
- Supports new 4BS occupancy, gas detection, automated meter, environmental, and weather station EEPs.

Now with the benefit of 902MHz, the Reliable Controls SSE and SSEA products have the freedom to communicate on the 902 MHz band for the North American market. This new radio frequency increases the range of communications and enhances the resistance to external interference.

Wireless SPACE-Sensors are working, wherever you are ...

EnOcean – Green. Smart. Wireless.					
Radio Approval Overview					
Region/Country	Frequency (MHz)	Radio Standard	Approval types	Marking	Authority
European Union incl. Switzerland, Turkey & Norway	868.300	R&TTE ETSI EN 300 220-1	modular ¹⁾ , product ²⁾	CE	http://ec.europa.eu/enterprise/sectors/rtte/index_en.htm
USA	315.000 902.875	FCC part 15 class B	modular ¹⁾³⁾ , product ²⁾	FC FCC ID: xxxxxxxx	www.fcc.gov
Canada	315.000 902.875	IC RSS-210	modular ¹⁾³⁾ , product ²⁾	IC IC ID: xxxxxxxx	www.crtc.gc.ca
China	315.000 868.300	SRRC approval	Product only ²⁾⁴⁾	CMIIT ID: xxxxxxxx	www.mii.gov.cn



MPA-111-A-F: A New Addition

Complementing the existing MPA-12-A-F series, the new MPA-111-A-F adds more capabilities to the MACH-ProAir family. The MPA-111-A-F accomodate 1 Universal Input, 1 Universal Output, and 1 TRIAC Output, as well as onboard flow pickup and modulating actuator. With the new universal output, the MPA-111-A-F can now conveniently be used for modulating reheat applications. Further details are available online at www.reliablecontrols.com.

Engineered to exceed the specifications for a wide variety of Variable Air Volume (VAV) applications, the Reliable Controls® Mach-ProAir™ is a fully programmable BACnet Building Controller (B-BC) with numerous downloadable standard codes and flexible Input / Output options, all priced to meet a modest budget.



ADDITIONAL FEATURES INCLUDE:

- 32 NETWORK IN POINTS / 16 NETWORK OUT POINTS
- MULTIPLE AND SINGLE POINT TREND LOGS
- 8 ANALOG / BINARY & MULTISTATE CUSTOM UNITS
- RUNTIME REPORT
- BACnet, MS/TP (EIA-485) PROTOCOL
- SELECTABLE STANDARD AND CUSTOM RANGES
- DYNAMIC DATABASE
- ARRAYS / TABLES / CALENDARS
- HIGH PERFORMANCE 32-BIT EMBEDDED MICROCONTROLLER
- ONBOARD FLASH MEMORY
- NON-VOLATILE MEMORY
- FIVE YEAR WARRANTY

AND MORE!



Better by design™

WHAT'S YOUR RETURN?

MAXIMIZING YOUR ROI WITH BACNET AND BACKWARD CAPATIBILITY

Maximizing a return on investment (ROI) is something every business person has thought about. For nearly 30 years, Reliable Controls has brought enduring value and longevity to building control products. The company continues to support multiple protocols, including its proprietary RC protocol, and still services and repairs products manufactured since 1986. Maintaining a backward compatible, cohesive connection with all previous generation products is a very unique differentiator for Reliable Controls, especially in a world where planned obsolescence is commonplace.



Celebrating the recent release of the version 8 firmware, the MACH-Pro series now supports an expanded network architecture, Dynamic IP addressing (DHCP), and Simple Network Time Protocol (SNTP) support. Continuing the trend of backward compatibility, the MACH-Pro series also supports an operating system (OS) mode that allows the controller to host both BACnet and RCP controllers on the same MS/TP (EIA-485) network.



This OS mode permits your existing installations with legacy controllers to be seamlessly expanded with new Reliable Controls BACnet controllers; ensuring an ROI that will endure for years to come!

NEW DEALERS

New Reliable Controls Authorized Dealers!



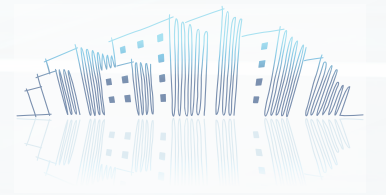
Poco LLC
Jackson, WY, USA



Giga Company Ltd.
Tan Binh Dist., Ho Chi Minh, Vietnam

TRADE SHOWS

Visit Reliable Controls at these upcoming trade shows:



2015 CONCAPAN Honduras
November 11-13, 2015
Tegucigalpa, Honduras



2015 Greenbuild
November 18-19, 2015
Washington, D.C. USA



2015 PM Expo
December 2-4, 2015
Toronto, Ontario, Canada



2016 AHR Expo
January 25-27, 2016
Orlando, Florida, USA



2016 MCE
March 15-18, 2016
Milan, Italy

INTERNATIONAL STANDARDS

What's good for you, your business, and the environment?

The short answer is the **International Standardization Organization (ISO)**. When products and services conform Internationally, you can have confidence that they are safe, reliable, and built to exacting quality and environmental standards.

Changes introduced in the 2015 revision of ISO 9001 ensure that "quality" continues to adapt with the changing environments in which organizations operate. Some of the key updates in ISO 9001:2015 include information restructuring, introduction of new terminology, emphasis on risk-based thinking, improved applicability for services, and increased leadership.



ISO 14001:2015 improves "environmental" performance through more efficient use of resources and waste reduction, helping to gain a competitive advantage. Some of the key updates in ISO 14001:2015 include improved environmental management & performance, a focus on leadership, proactive environmental protection initiatives, life cycle thinking when considering environmental aspects, and addition of communications strategy.

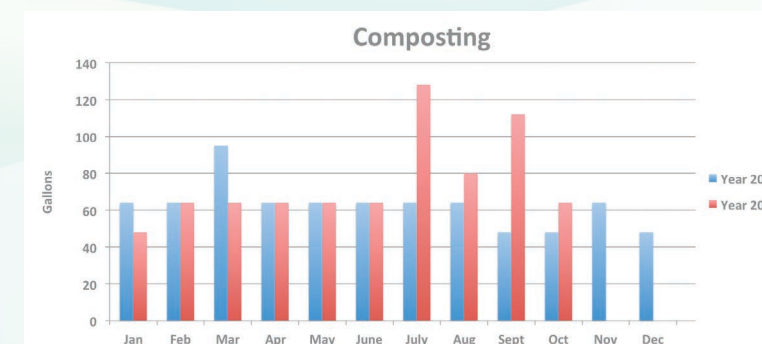
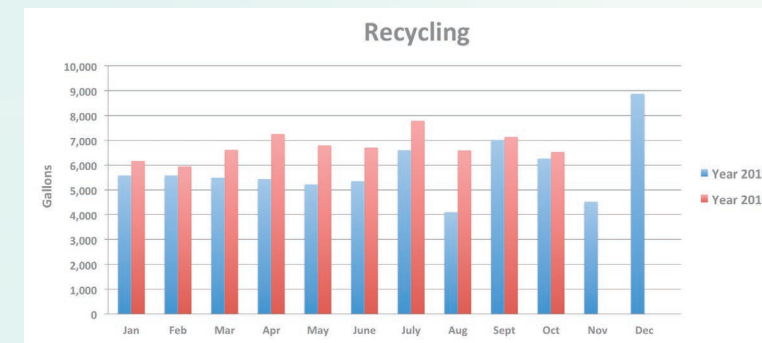
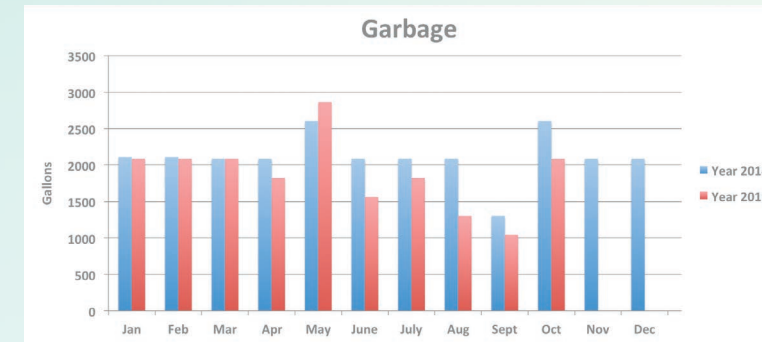
THE BENEFITS OF ISO 2015 STANDARD UPDATE

- Organized processes
- Improved efficiency and effectiveness of processes
- Continual Quality and Environmental improvement
- Implementation of a Quality and Environmental Management System
- Create satisfied customers, management, and employees

RELIABLE CONTROLS AND ISO 14001

What's our Standard?

At Reliable Controls we take pride in meeting high standards. We monitor garbage, recycling, compost, energy consumption, office paper consumption, and water usage.



By comparing the garbage to recycling you can visually see the correlation of less garbage entering a landfill equating to a higher level of recycling.

PETROCHINA CHANGQING OILFIELD OFFICE BUILDING

XI'AN CITY, SHAANXI PROVINCE, CHINA

CORPORATE

INTELLIGENT BUILDING

This gasoline industry head office for PetroChina Changqing Oilfield, is located in Xi'an City, Shaanxi Province. In 2012, Shaanxi Jinruan Zhisheng Electronic Technology Co. Ltd. installed MACH-System™ controllers, which are responsible for centralized management and energy conservation control for all equipment in the heat pump machine room.

PROJECT DETAILS

The Reliable Controls MACH-System is composed of 4 MACH-ProSys controllers and 25 expansion modules. Connected by Ethernet, the MACH-ProSys controllers command four heat pump packages with auxiliary water pumps and electric valves. At the same time, the controllers act as Modbus-RTU masters monitoring temperature, water flow, electric current and other parameters. The system optimally starts and stops relevant equipment and avoids unnecessary equipment operation, reducing the energy consumption of the entire operation.

To ensure that computer breakdowns do not affect the operation of the heat pump system, a touch screen was added to make it easy for operators to modify the operation parameters on site.

The Reliable Controls MACH-System has been flawless since its installation. The owners of this office are all very satisfied with the installation and reliability of the system.

To learn more about projects using Reliable Controls® visit
www.reliablecontrols.com/projects/overview



PROJECT TYPE:

New Construction

INSTALLATION TYPE:

HVAC, Electric Power Monitoring

TOTAL AREA:

100,000 m² (1,076,000 ft²) office

EQUIPMENT INSTALLED:

1 MACH-ProWebSys™

4 MACH-ProSys™

4 MACH-ProPoint-I™

21 MACH-ProPoint-IO™

NETWORK:

EIA-485, Ethernet

INTEGRATION:

BACnet®, Modbus

TOTAL SYSTEM POINTS:

500 points

RELIABLE CONTROLS® DEALER:

ShaanXi Jinruan Zhisheng Electronic Technology Co. Ltd.

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