

FARMACORP COVID-19 VACCINE STORAGE UNITS

SANTA CRUZ, COCHABAMBA, AND LA PAZ, BOLIVIA

INTRODUCTION

COVID-19 vaccines are fragile substances that can lose their potency if exposed to inappropriate conditions. Each COVID-19 vaccine has unique storage requirements; for example, Moderna's mRNA vaccine must be shipped and delivered at a temperature of -20°C (68°F), can be stored for up to 3 months at 2.8°C (37°F), and is stable at room temperature for only 24 hours. These requirements provide complex challenges to ensuring the stability and efficacy of every dose administered around the world.

As in many countries in 2021, the government of Bolivia needed to ensure equal, equitable access to COVID-19 vaccines nationwide. [Farmacorp](#), Bolivia's largest pharmacy chain, played a pivotal role in transporting, storing, and providing vaccines in the cities of Santa Cruz, Cochabamba, and La Paz.



MARKET SEGMENT

Retail

PROJECT TYPE

New construction

INSTALLATION TYPE

HVAC

TOTAL AREA

8,000 m² (86,111 ft²)

PROTOCOL

BACnet

INSTALLED EQUIPMENT

1 MACH-ProSys™ controller
15 MACH-ProView™ controllers
RC-Archive® software
RC-RemoteAccess® software
RC-Reporter® software
RC-WebView® software

TOTAL SYSTEM OBJECTS

233

RELIABLE CONTROLS
AUTHORIZED DEALER



Asesorías & Soluciones de Ingeniería

reliablecontrols.com

FARMACORP COVID-19 VACCINE STORAGE UNITS

SANTA CRUZ, COCHABAMBA, AND LA PAZ, BOLIVIA

PROJECT DETAILS

Authorized Dealer [A&SING](#) provided a custom solution to the challenge of storing COVID-19 vaccines in 15 of Farmacorp's retail locations.

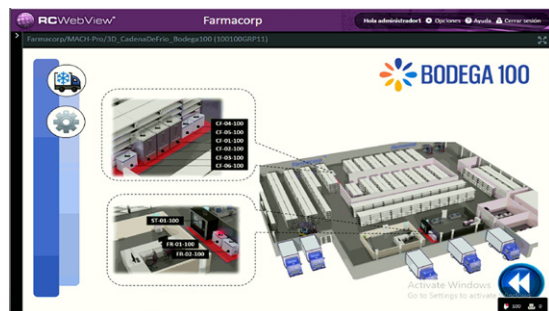
A&SING installed a MACH-ProView on each of 15 vaccine storage coolers to maintain the distribution cold chain and provide temperature and humidity control. The MACH-ProView is a freely programmable BACnet Building Controller ideal for monitoring environmental conditions and energy performance in a space. All 15 storage coolers are controlled centrally at a Farmacorp distribution center using a MACH-ProSys controller and a suite of Reliable Controls software. With extensive networking capabilities, highly scalable inputs and outputs, and small size, the MACH-ProSys is an ideal choice for complex integrated systems like this one.

RC-WebView connects the 15 independent control systems in each location into a single enterprise website that facility personnel can access and control from the distribution center using the internet. An added complexity to this project was the requirement to adhere to Code of Federal Regulations (CFR) Title 21 Part 11 rules, which prescribe that electronic data in regulated-industry processes meet the same legal requirements as paper records. RC-WebView is purpose-built to be a component of a Title 21 Part 11-validated system for indoor environmental control using the following features:

- Digitally signed audit logs to ensure authenticity
- Dual approval for system security and user account changes
- Printout watermark security option
- Automatic password expiry trigger after a specified number of days
- Option to lock out a user after a specified number of failed logon attempts
- Improved support to include Transport Layer Security 1.2

Thanks to RC-Archive software, Farmacorp fully owns and controls its data and benefits from a robust, dependable record of cooler performance. And RC-Reporter extracts intelligence from that data with readable, reliable analytics that help facility personnel find opportunities to improve operational efficiency. Using RC-RemoteAccess BACnet Secure Network software, A&SING simplified IT management for Farmacorp and improved data communications in a way that's secure, affordable, and scalable.

The entire A&SING team, with the help of application engineers at Reliable Controls, were enthusiastic about innovating this solution for Farmacorp that helps ensure the stability and efficacy of COVID-19 vaccines for the citizens of Santa Cruz, Cochabamba, and La Paz.



Interested in Reliable Controls technology for your next project? Find an Authorized Dealer near you:

reliablecontrols.com/sales

Explore other Reliable Controls projects:

reliablecontrols.com/projects/profiles