# CO<sub>2</sub> solution

Optimized CO<sub>2</sub> electronic system for retail applications







The  $\rm XeCO_2$  system is the complete and innovative solution for the retail world that ensures an optimized efficiency management of the  $\rm CO_2$  plants.  $\rm XeCO_2$  consists of controllers for refrigerated cabinets and compressor racks/condensing units and of monitoring and controlling systems.

#### XM600

## High performance multiplexed cabinet controllers

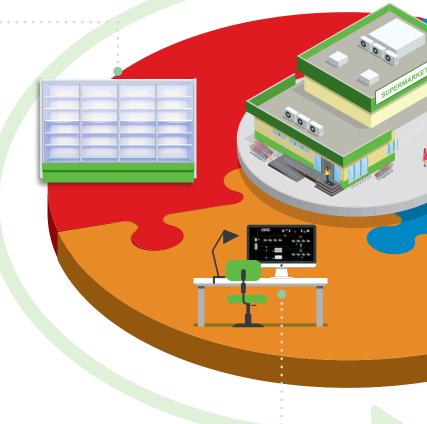




- Advanced superheat management depending on the compressor rack status
- Performance improvement through the overfeed evaporators that result in less defrost demand
- Quick and easy installation thanks to pre-configured maps
- Smart function updates directly in the field
- High efficiency whether using a stepper or a PWM valve







#### **XWEB**

## Advanced controlling and monitoring systems

- Increased strategy-control performance thanks to XM600 & iProRACK synchronization
- 2 serial ports with 19200 max speed for independent field bus faster data reading
- · Dual ethernet ports for service use
- Memory expansion via micro SD for configuration back-up

- Safer systems thanks to the synchronization among compressor racks, cabinets, and monitoring systems
- Powerful and adaptable hardware platforms for any control need
- · Maximum efficiency thanks to dynamic superheat management
- · Advanced algorithms for energy saving management
- · Easy and intuitive installation and use
- · Cost reduction through COP improvement
- Heat recovery and integration with HVAC systems for efficiency improvement
- CRO for compressor rack optimization via dynamic suction set point



\*compared to a conventional transcritical R744 booster supermarket unit with parallel compressor, in a location with 20 °C of average external temperature



#### Controller platform for transcritical booster racks







- Complete management of dual heat recovery, gas cooler bypass, parallel compression and de-superheater
- High performance thanks to the evaporator overfeeding compatibility
- Warm climate solutions through parallel compression and the adiabatic function
- Increased compressor life by integrated oil injection management
- · Safeguarding by gas leak detector compatibility
- High flexibility via a modular platform to satisfy any rack dimensionCost reduction through COP improvement
- Heat recovery and integration with HVAC systems for efficiency improvement
- CRO for compressor rack optimization via dynamic suction set point



- Easier and faster access to information through the innovative web user interface
- Same rich user experience for PC, tablet and smartphone access
- Compatibility with ProAct Connect+ Enterprise Management Software







### **About Copeland**

Copeland, a global provider of sustainable climate solutions, combines category-leading brands in compression, controls, software and monitoring for heating, cooling and refrigeration. With best-in-class engineering and design and the broadest portfolio of modulated solutions, we're not just setting the standard for compressor leadership; we're pioneering its evolution. Combining our technology with our smart energy management solutions, we can regulate, track and optimize conditions to help protect temperature-sensitive goods over land and sea, while delivering comfort in any space. Through energy-efficient products, regulation-ready solutions and expertise, we're revolutionizing the next generation of climate technology for the better.

