



# Centrifugal Compressor Control

Xe-Series



# Intelligent Compressor Control

Ingersoll Rand Xe-Series compressor controls do more to enhance the productivity, efficiency and reliability of your air compressor.

## A Controller Like No Other

The Xe-Series controller's intuitive, high-resolution color display improves productivity by making important compressor information quick and easy to find. The controller also posts information that users can access on a local web page. It can even send email notifications when it detects a problem.

Achieving best-in-class efficiency is very important at Ingersoll Rand. Xe-Series controls utilize the latest control algorithms to provide the lowest energy consumption in every situation. Built-in control logic ensures system reliability by precisely managing discharge pressure, while maximizing throttle range. The controller features useful timers, compressor information and alerts that indicate when maintenance is necessary to help optimize care of your investment.



## Graphical User Interface...

Tabbed page layout makes navigating pages simple and fast.

Display is easy to read and provides a dynamic visual picture of your compressor's operation.



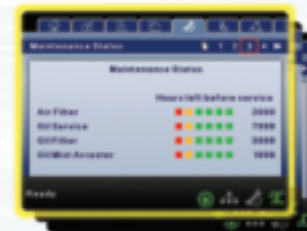
The compressor's most critical information is constantly displayed on the controller's status bar.



Home pages provide access to the most important information.



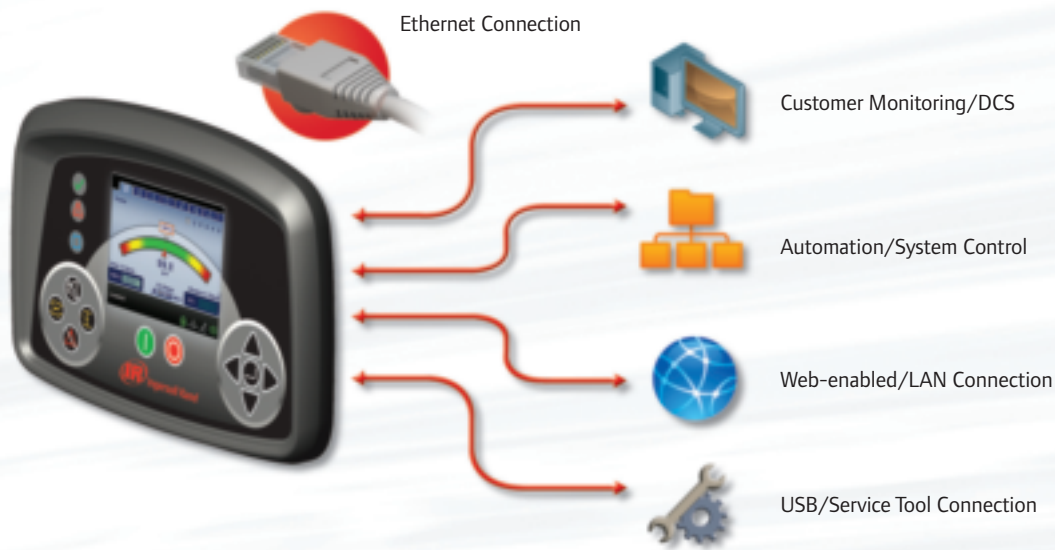
Graphing and data acquisition available on-screen or via web pages.



Convenient timers keep track of your maintenance program, allowing you to prepare for scheduled maintenance in advance.

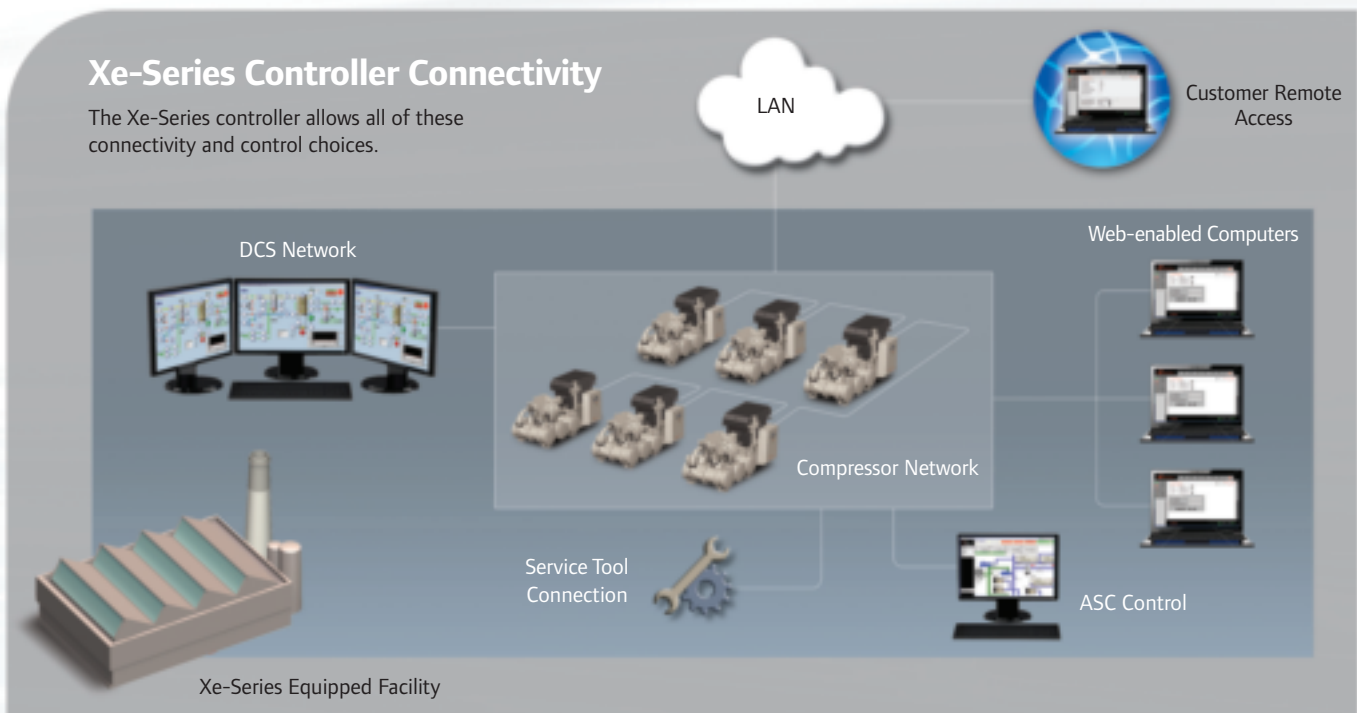
# More Connectivity Choices Than Ever Before

The Xe-Series controller provides maximum flexibility and convenience through a full range of connection choices.



## Xe-Series Controller Connectivity

The Xe-Series controller allows all of these connectivity and control choices.



# More Than Just Data—Knowledge

Xe-Series controls communicate vital system knowledge that helps you understand your compressor by presenting information in a variety of user-friendly formats to suit your needs.

## Transmitting vital information using a standard web browser...

From any computer or mobile device!



Web pages feature the same convenient status bar found on the controller interface.



- Check and adjust parameters remotely
- Review, sort and filter over 252 events with the built-in event log
- Graph selected parameters
- Schedule equipment maintenance
- Automate inspections
- Generate performance reports
- Schedule automatic emails for distributing reports
- Download trending data to external applications
- Receive email notification of alarms and trips

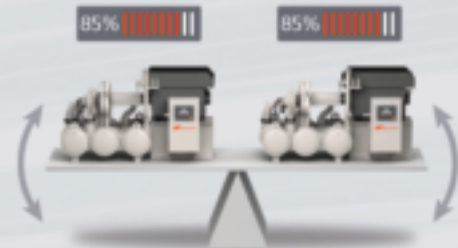


# Better Control, Greater Savings

With built-in control logic, Xe-Series controls provide you with optimal safety, reliability and energy savings from your compressor. A variety of standard and optional control features give you more ways to effectively manage and monitor your investment.

## Standard Control Features

- **Constant pressure control** – Dynamically maintains precise discharge pressure throughout the full range of operating capacity (100% to 0%). Constant pressure control is used to minimize process pressure variations with rapid reaction to sudden demand variations.
- **Auto-dual control** – Uses inlet modulation to maintain constant system pressure over the compressor's full turndown range. When the load drops below the turndown range, the controller automatically transitions to load/unload mode. Programmable auto-dual control optimizes operating efficiency when process demand varies widely over time.
- **Energy Smart Set Point™ (ESS)** – Adjusts a compressor's pressure set point internally to balance and share load between multiple compressors in the same system. ESS reduces the amount of bypassed air, which saves energy.



ESS dynamically balances multiple compressor loads.

## Optional Control Features



- **Ambient Control software** – Maximizes a compressor's operating throttle range, increasing usable turndown and substantially reducing or eliminating wasteful compressed air bypass in changing ambient conditions.



- **Integrated Multi-Machine Control (IMMC)** – Automatically sequences and assigns pressure schedules to multiple compressors to minimize the number of compressors operating at any given time and achieve optimum efficiency.



- **Air System Controller (ASC)** – Manages an unlimited number of compressors as well as auxiliary equipment such as dryers, fans and pumps. This advanced software provides precise control plus reporting, email notifications, advanced scheduling based on system conditions and a comprehensive information dashboard delivered to a computer screen.

# Connectivity, Communication and Control

Significantly improve system performance by upgrading to the intuitive Xe-Series controller.

## The Latest in Connectivity

Adding an Xe-Series controller to an existing compressor provides a dedicated RS486 port that communicates with the DCU system, as well as an Ethernet port that enables the posting of rich content and remote control via web pages. The Ethernet port also supports Modbus TCP communication and control.



## Constant Communication

The Xe-Series controller's intuitive, high-resolution color display enables quick and easy retrieval of all critical compressor data. Information can be accessed when and where you choose via web pages posted on the local area network. Warnings, trips and key reports can be emailed automatically to user-specified recipients.

## Superior Control

The Xe-Series controller optimizes compressor operation for better energy efficiency. Parallel processors manage control functions and web functions separately, assuring that the control algorithms have all the capacity they need to deliver the lowest energy consumption for any operating condition.

A retrofit solution for every situation.

## Centac® Microcontroller (CMC) to Xe-Series Upgrade Kit

The Xe-Series controller plugs into the same opening and connections used by the CMC, and your Ingersoll Rand service representative can convert custom programming in the CMC to Xe format for a fast, seamless transition.



## MP3 to Xe-Series Upgrade Kit

The MP3 kit is designed to take advantage of the hardware in your compressor's current control panel, while upgrading to the Xe-Series controller's advanced capabilities.

## Xe-Series Upgrade Panels

Complete retrofit panels can be built for any compressor, whether you're starting with an electro-pneumatic design, want better options in the control panel itself or simply need to replace an old panel.

# Ingersoll Rand...At Your Service

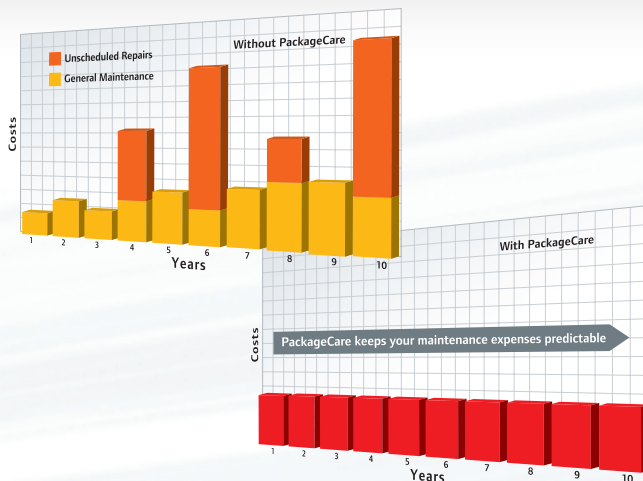
No matter where your facility is located, Ingersoll Rand is committed to serving you 24 hours a day, seven days a week, available to support you with innovative and cost-effective service solutions that will keep you running at peak performance.



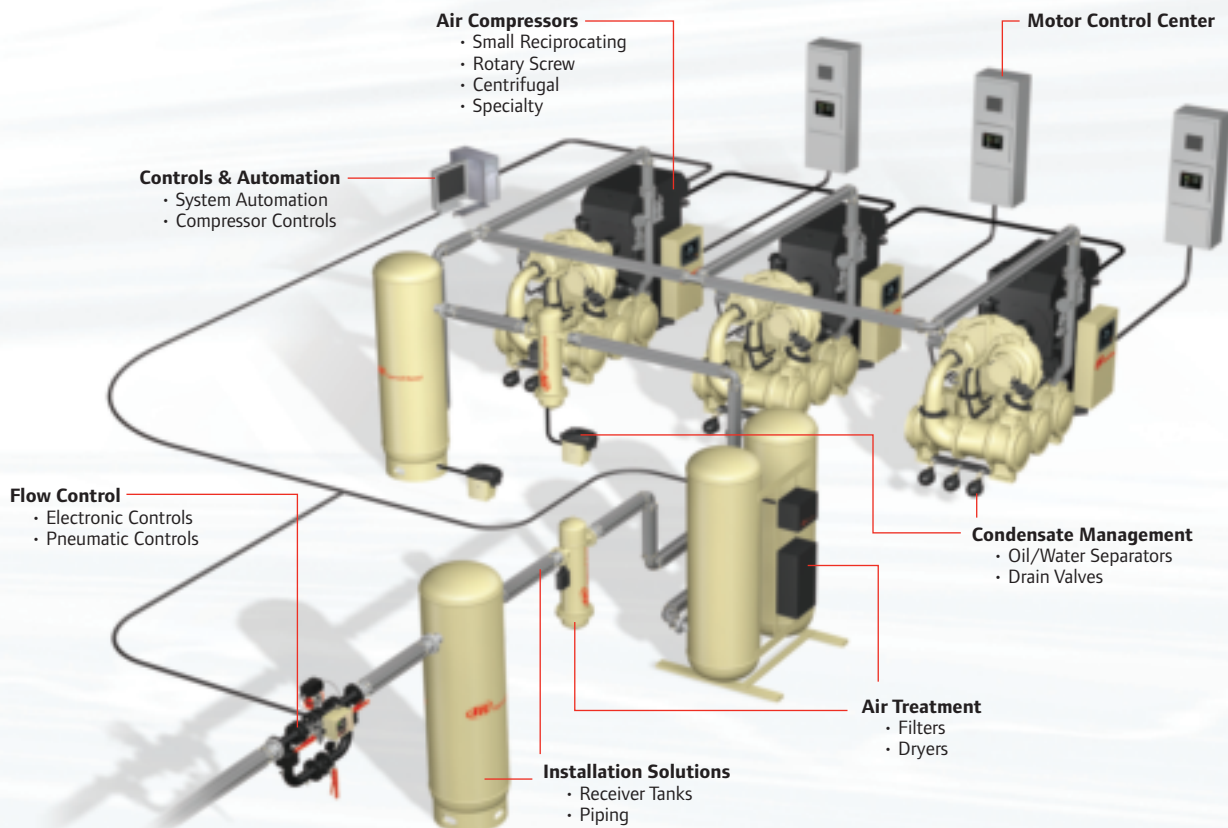
Let Ingersoll Rand handle the pressures and responsibilities of owning a compressed air system with our signature service contract.

## With PackageCare, you can...

- Control costs and keep your equipment running at peak efficiency.
- Protect yourself from all repair and replacement expenses over the life of the agreement.
- Maintain or improve the operational efficiency of any compressor, regardless of age, make or model.



## Count on Ingersoll Rand for All Your Air System Requirements





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