

FreshView™

EC12 Ripening Controller



Ethylene

Temperature

CO₂

O₂

Pulp Temperature

Relative Humidity

MONITOR • CONTROL • RIPEN • DEGREEN • STORAGE • SAFETY

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FreshView

EC12 Ripening Controller



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Ventilating	Cooling	CO2	Heating	Humidifying	Dehumidifying	Input	Manual
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Ventilating	Cooling	CO2	Cooling	Heating
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Developed in Australia, the **FreshView EC12 Ripening Controller** system is the latest proven robust technology to monitor, control, ripen, degreen, and store fruit and other perishable commodities. The modular design ensures simple installation and provides flexibility to expand to meet operational demands of small, medium and large fruit handling facilities.

By automatically monitoring and controlling the concentration and levels of ethylene, carbon dioxide, temperature, relative humidity, pulp temperature, and oxygen, the **FreshView™ EC12 Ripening Controller** system leads to a higher standard of presentation, longer shelf life and a more uniformly ripened, tastier piece of fruit.

Ideal for

- Distribution centres
- Supermarket chains
- Ripeners
- Packing sheds for grower / packers
- Farmers
- Marketers
- Government & Industry post-harvest reseach facilities



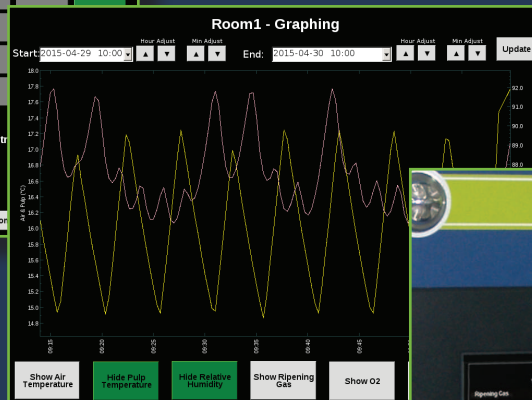
- System for ripening, degreening and storage
- On-screen display of environmental conditions and system status
- Monitor and control ethylene, CO₂, temperature, relative humidity, pulp temperature, O₂ and sub-systems
- Remote access and control via the Internet for monitoring, control, system status, historical data and set-point adjustment
- Monitor and control up to 12 rooms¹

Room2 - Parameter Setup

	Current Value	Low Setpoint	Setpoint	High Setpoint	Low Alarm	High Alarm	Control Enabled
Ripening Gas:	20.3	19	20	21	5	70	Enabled
CO2:	5.3	4	5	6	-1	10	Enabled
Air Temp:	17.2	13	15	17.5	12	20	Enabled
Humidity:	82.0	80	90	95	65		
Pulp Temp:	16.4	13	15	17.5	12		
Oxygen:	19.6	19	20	22	18.5		

General Output: Disabled Room Control: Enabled

Buttons: Graphing, Manual Room Venting, Select Transmitters, Setup IO, Change Room Name, Remove Room



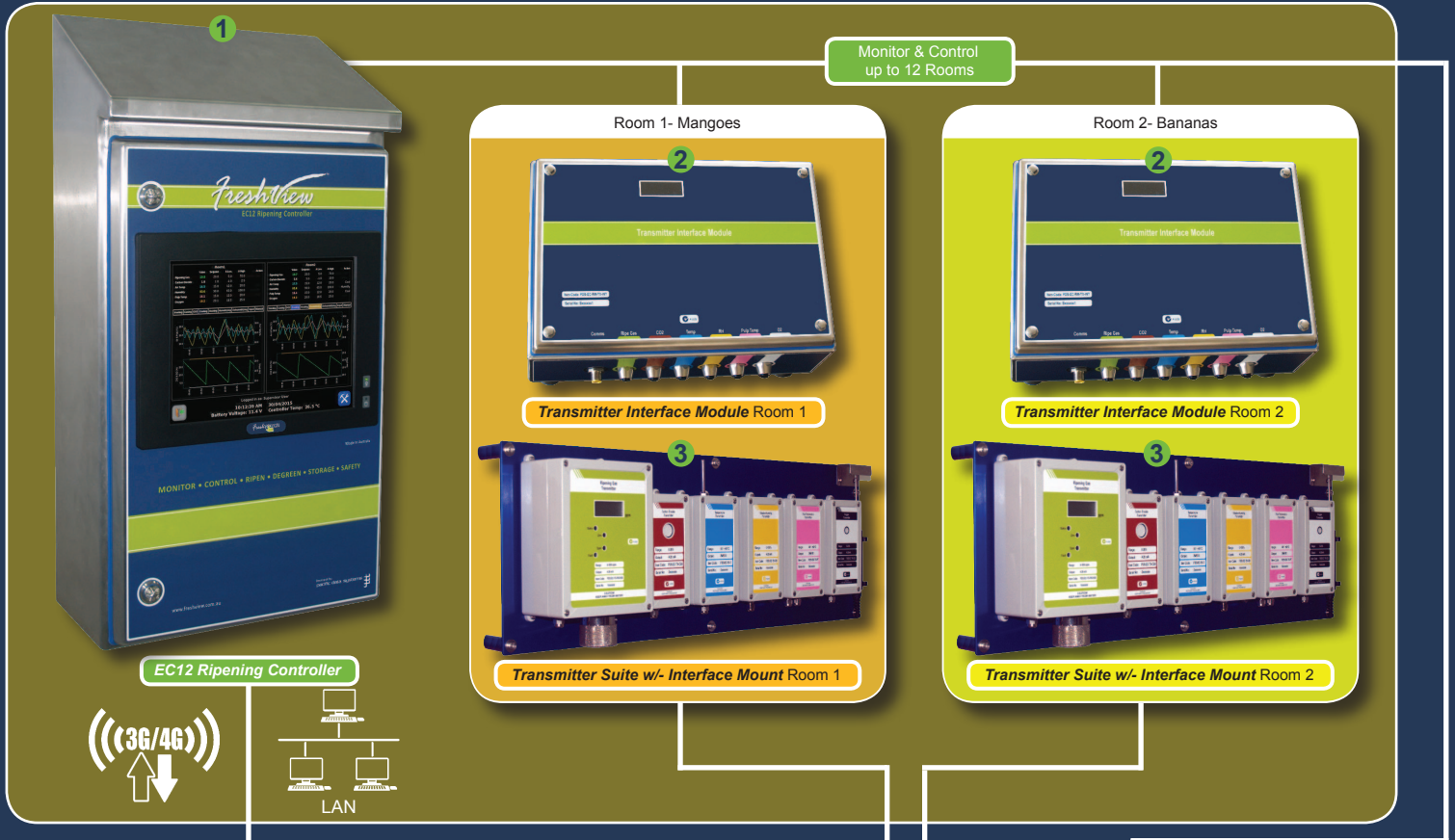
¹System limit - 12 rooms (two transmitters per room) or maximum of 24 transmitters per controller.

System Overview

Example of a typical system deployed to monitor multiple fruit cooling/storage rooms

The *Fresh View™ EC12 Ripening Controller* may be used with our industry-standard sensor/transmitters for ethylene, carbon dioxide, relative humidity, pulp temperature, relative humidity, and/or oxygen.

As outlined in the example illustration below, a setup for two ripening rooms might include the full transmitter suite, Digital Input/Output Module (for sub-system control e.g. cooling, flashing light etc) and Gas Delivery Module (for delivery of ripening gas to two rooms). For larger installations, multiple transmitter interface modules can be networked to the *EC12* providing greater flexibility.



Remote Web Portal

Access, monitor and control your system using your web-enabled device



The freshview.com.au web portal allows for remote monitoring and control via an exclusive customer code, username and password login, providing the end user with 'round-the-clock peace of mind for their valuable produce.



System Hardware

The main components used for monitoring and controlling the *EC12* system

- EC12 Ripening Controller** (PDS-EC-12) the main controller for configuration and data access - locally or remotely.
- Transmitter Interface Module** (PDS-EC-RM-TX-INT) allows the main controller (*EC12*) to receive data from the individual transmitters - up to six transmitters per room.
- Transmitter Interface Mount** houses up to six transmitters; **ethylene**, **CO₂**, **temperature**, **relative humidity**, **pulp temperature**, and **O₂**.
- Digital Input / Output Module** (PDS-EC-DIM-XX-XX / PDS-EC-DOM-XX-XX) allows the main controller to interact with other sub-systems. Multiple models available each with a potential of up to 36 inputs and 20 outputs. Mix 'n' match up to 12 DIMS / DOMS across a single application.
- Gas Delivery Module** (PDS-EC-GDM-2C / PDS-EC-GDM-4C) allows the delivery of gas to either two or four rooms from a single gas source.



*Additional hardware (gas bottles, sub-systems components) not supplied.

Transmitters

Sensing technology for use with *FreshView™ EC12 Ripening Controller*

We offer a range of high-quality Australian-made transmitters for use in conjunction with, or independent of, the *FreshView™ EC12 Ripening Controller*. Transmitters are available for the detection of ripening gas (ethylene), carbon dioxide, temperature, relative humidity, pulp temperature and oxygen.

Each transmitter provides an analogue output signal and is housed in an enclosure that provides suitable protection against water and dust ingress (IP65²). Transmitters can be interfaced with other monitoring and control systems.

...high-quality
Australian-made
sensing technology...

- Australian Made
- High Quality Sensing Technology
- Robust Design
- Water & Dust Resistant



Ripening Gas Transmitter (PDS-EC-TX-RG1000/100)

Measuring range: 0 to 1000 / 0 to 100 ppm
Sensor technology: PID / PID
Sensitivity: 1 / 0.1 ppm
Power: 8 to 35 VDC
Output: Analogue: 4 to 20 mA

Carbon Dioxide Transmitter (PDS-EC-TX-CO₂)

Measuring range: 0 to 20% CO₂
Sensor technology: NDIR
Accuracy: +/- 2.5% CO₂
Sensitivity: 0.05% CO₂
Long-term Stability: Within 5% of range over 5 years
Warm-up time: <30 minutes to reach specifications
Power: 10 to 30 VDC
Output: Analogue: 4 to 20 mA

Temperature Transmitter (PDS-EC-TX-T)

Measuring Range: -40 to +60 degrees C
Sensor Technology: Pt100 platinum RTD
Accuracy: +/- 0.2 degrees C
Long-term Stability: 0.2 degrees C over two years
Output: 3WRTD

Relative Humidity Transmitter (PDS-EC-TX-RH)

Measuring Range: 0 to 100 %RH
Sensor Technology: Capacitive
Accuracy: +/- 2% RH
Long-term Stability: +/- 2% RH over two years
Power: 9 to 30 VDC
Output: Analogue: 4 to 20 mA

Pulp Temperature Transmitter (PDS-EC-TX-PT)

Measuring Range: -40 to +60 degrees C
Sensor Technology: Pt100 platinum RTD
Accuracy: +/- 0.2 degrees C
Long-term Stability: 0.2 degrees C over two years
Outputs: 3WRTD
Probe Cable Length: 5 metres (other lengths available to order)
Probe Construction: 316 stainless-steel body, 4 mm (OD), 150 mm (L), with tapered chisel-end tip

Oxygen Transmitter (PDS-EC-TX-O₂)

Measuring Range: 0 to 25% O₂
Sensor Technology: Capillary Flow Control
Accuracy: +/- 0.1% O₂
Long-term Stability: +/- 0.1% O₂ over two years
Power: 7.5 to 35 VDC
Output: Analogue: 4 to 20 mA

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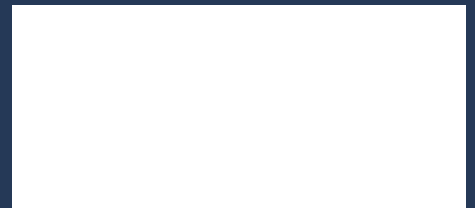
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About us:

Our company provides reliable, cost effective and timely solutions utilising the latest proven technology for fruit ripening and controlled atmosphere monitoring systems. We are dedicated to servicing our customer's needs and understanding the industries requirements to help their businesses grow.

Your local distributor:



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