

# SmartZonePLUS™



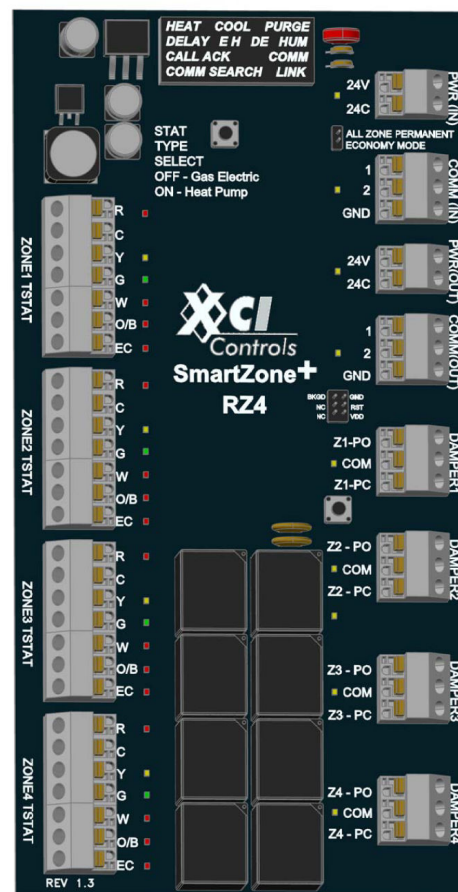
## RZ4 Networked HVAC Expander Module

*For Residential & Light Commercial Applications*

- ADD 4 ZONES TO EC1 CONTROLLER
- SCREWLESS WIRING CONNECTORS
- EQUIPMENT STATUS DISPLAY
- LEDs DISPLAY STATUS OF STATS
- ZONE SPECIFIC ECONOMY MODE
- USE GE OR HP THERMOSTATS

### General Description

The **SmartZonePLUS™** family of residential and light commercial zone controllers provide reliable control of up to thirty-three (33) zones from a single forced-air HVAC system. The RZ4 expander module includes an LED display with full text for status monitoring and diagnosis of each zone as well as equipment mode. The RZ4 is fully communicating with the equipment controller (EC1). This allows each RZ4 to be mounted near the zones which it serves. This requires less stat wire and damper wire on large projects. On large projects, SmartPanel™ allows stowaway installation with easy wiring and locking door (see SmartPanel™ Spec Sheet). Heavy-duty damper relays allow multiple dampers to be connected (parallel daisychain) when several dampers are required on each zone. Permanent Comfort/Economy mode can be applied to all four zones or individually applied Comfort/Economy mode can be operated through each thermostat for true utility savings.



**RZ4 Expander Module**

### Installation, Operation, Service, Customer Features

- RZ4 remote zoning boards accommodate all types of thermostats including heat pump and gas/electric. Applications such as In-floor heating and fan powered boxes with reheat are controlled.
- Standard single stage thermostats are all that is required since staging is controlled by the EC1.
- Quick-Connect Screwless Terminals means easy wiring without stripping screws due to excessive tightening.
- Innovative Enclosure Design with Multiple Wiring & Mounting Options allows visual monitoring without removing the cover.
- New SmartPanel™ wiring enclosure with locking door allows stowaway modular installation.
- Color-coded diagnostic LEDs for damper position, thermostat status and equipment status.
- Full text display allows viewing of system operation.
- System communications for easy troubleshooting.
- Contractor can monitor the current mode of the equipment from any RZ board.
- Comfort/Economy mode allows each zone to call for equipment (Comfort) or control the damper(s) only (Economy). This feature will allow unoccupied zones to economize by allowing conditioned air into an unoccupied zone only when the equipment has been turned on by a different occupied zone that is in the comfort mode.
- Each RZ board can show acknowledgement of thermostat calls from the RZ board to the EC1. This communication status indicator gives quick verification that calls have been received by the Equipment Controller.
- Separate screwless terminals allow the contractor to pass communications and power through each RZ board and on to the next RZ board. PWR (OUT), COMM (IN), COMM (OUT).
- Stable RS-485 communications using CAT5E wire.

# SPECIFICATIONS

<b>Power</b>	14VA max (24VAC @ 375mA); <b>SmartZonePLUS™</b> RZ4 Controller Only. Single transformer design powers the controller, thermostats and dampers Separate Rc & Rh terminals (disconnect jumper) for separate equipment transformers
<b>System Power Requirements</b>	22VA (RZ4 Controller & 4 Thermostats) + Damper Power = Transformer Size (in VA)
<b>Protection</b>	Electronic Auto-Reset Fusible Links
<b>Equipment Outputs</b>	Outputs are relay driven. 2A @ 24VAC
<b>Damper Outputs</b>	3VA per damper - Power open/Power close 10VA per damper - Power close/Spring open 10VA per damper - Power open/Spring close
<b>No. of Dampers Per Output</b>	All 10VA dampers; use up to 4 dampers per zone damper output. All 3VA dampers; use up to 10 dampers per zone damper output
<b>Display &amp; LED's</b>	Thermostat Inputs (RZ boards) R (red), C (no LED), Y (Yellow), G (Green), W (red), O/B (Orange), EC (Green)
Zone Damper Outputs	Zx-PC (red), Zx-PO (Green), COM
Display	Heat, Cool, Purge, Delay, EH, De Hum, Call Ack, Comm Search, Comm Link
<b>Setup Features</b>	
Stat Type Select Button	Press to toggle HP or GE stat selection
All Zone Comfort Economy	Disconnect jumper for all zones comfort. Connect jumper for all zones Economy mode
RZ-4 Reset Button	Reset RZ4, all functions are suspended and reset (Call Tech Support if necessary)

## SmartZonePLUS RZ-4

