

SmartZonePLUS™



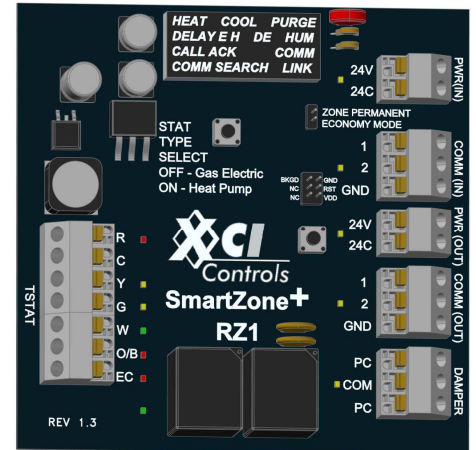
RZ1 Networked HVAC Expander Module

For Residential & Light Commercial Applications

- ADD 1 ZONE 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 RZ1 expander module includes LED displays with full text for status monitoring and diagnosis of each zone as well as equipment mode. The RZ1 is fully communicating with the equipment controller (EC1). This allows each RZ1 to be mounted near the zone which it serves. This requires less stat wire and can be “factory mounted” on the damper for large projects. On other 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 daisy-chain) when several dampers are required on each zone. Permanent Comfort/Economy mode can be applied to each zone or can be operated through each thermostat for true utility savings.



RZ1 Expander Module

Installation, Operation, Service, Customer Features

- RZ1 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 used 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 RZ1 can show acknowledgement of thermostat calls to the EC1. This communication status indicator gives quick verification that calls have been received by the EC1 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

Power	10VA max; SmartZonePLUS™ RZ1 Expander Module only. Single transformer design powers the controller, thermostat and damper(s)
System Power Requirements	12VA (RZ1 and 1 Thermostat) + Damper Power = Transformer Size (in VA)
Protection	Electronic Auto-Reset Fusible Links
Equipment Outputs	Outputs are relay driven. 2A @ 24VAC
Damper Output	3VA per damper - Power open/Power close 10VA per damper - Power close/Spring open 10VA per damper - Power open/Spring close
No. of Dampers Per Output	All 10VA dampers; use up to 4 dampers per zone damper output. All 3VA dampers; use up to 10 dampers per zone damper output
Display & LED's	
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
Setup Features	
Stat Type Select Button	Press to toggle HP or GE stat selection
Permanent Comfort/Economy	Disconnect jumper for all zones comfort. Connect jumper for all zones Economy mode
RZ1 Reset Button	Reset RZ1, all functions are suspended and reset (Call Tech Support if necessary)

SmartZonePLUS RZ-1

