

SmartZonePLUS-MC

Commercial & Residential HVAC Expandable Zoning System up to 33 Zones

ECOJAY SmartZone Controllers feature the latest and most advanced zone controls available in their class and are designed to deliver reliable operation for years. The **ECOJAY SmartZonePLUS** family features simple expandability up to 33 zones by adding any mix of SmartZonePLUS one and four zone expander boards to a single Main Controller (MC). The **MC** (Main Controller) operates the equipment and one zone (ZONE1).

SmartZonePLUS integrates residential and commercial grade controls into the SmartZonePLUS-MC for maximum flexibility and optimum control when needed. Convenient timesaving screwless terminals, push button/dipswitch panels and full function color system display simplify installation and troubleshooting.

Ecojay's SmartZonePLUS Economy feature enables users to conveniently switch individual zones or the entire System into ECONOMY MODE.

PLUS Features

- UP to 33 Zones
- Configurable Balance points for Heat Pump Aux Heat and Compressor (outdoor temp sensor required)
- Humidity Control from Zone 1 Thermostat
- Adaptive Opposing Call Changeover
- Adjustable Time/Temperature FRESH AIR Damper Control (Minutes per Hour with Outdoor temperature limits (with optional Outdoor Air Sensor))
- Intelligent 2 cool, 3 heat, time/temp staging or ZONE 1 thermostat
- Monitors # of calls for cool and heat, total zones, minutes before changeover, outdoor air temp, supply air temp, limit settings, purge, fresh air & equipment mode from the SmartZonePLUS-MC
- Smart Limit Control™ (SLC) protects compressor from short cycling and low temp, and heat exchanger hi temp

Easy Installation & Configuration

- Heat Pump, Dual Fuel and Gas/Electric Systems
- 3-Stage Heating and 2-Stage Cooling Equipment
- Quick-Connect Screwless Terminals
- Simple pushbutton and dipswitch configuration
- Monitor entire system from SmartZone Panel, including Supply Air Temp, Cut-Out, Purge, Delay and Economy
- Color Coded Diagnostic LED Indicators for each Thermostat Input
- Color LED Indicators show damper position (RED=Close, GREEN=Open)

Economy Features

- ECONOMY Mode built-in to EVERY ZONE
- User can switch between zone control and conventional 'single-thermostat' control
- Smart-Staging (including built-in Dual Fuel)

Convenient Customer Features

- Automatic Changeover for Maximum Comfort
- Customer never needs access to the SmartZone Panel
- Enable Emergency Heat from Heat Pump Thermostat
- Energize Fan from any Thermostat
- Superior 5-Year Limited Factory Warranty

SmartZonePLUS-MC

DIGITAL DISPLAY SYSTEM & COMM STATUS, SUPPLY & OUTDOOR TEMP, DIAGNOSTIC INFO

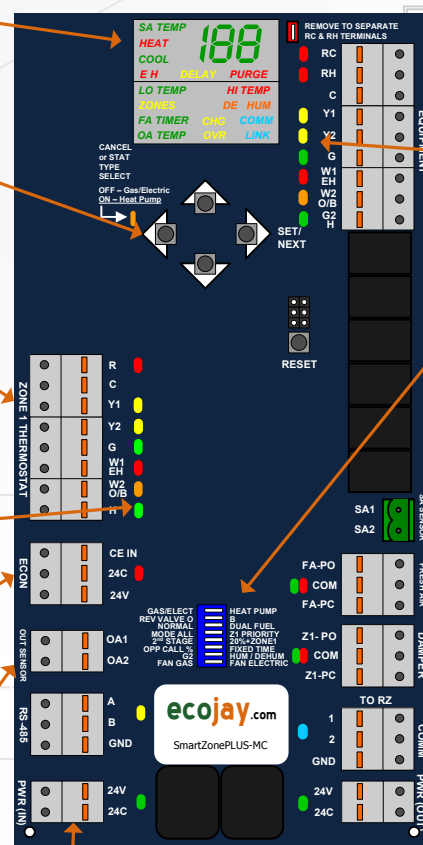
SIMPLE SETUP Pushbuttons for Temp Limits, Thermostat Setup, Humidity, Fresh Air & Balance Points

USE ANY THERMOSTAT HEAT PUMP OR GAS/ELECTRIC Single Stage, Two Stage & Humidity

LED Status Lights QUICKLY indicate Thermostat Calls

ECONOMY INPUT Easy System Setback

Outdoor Temperature



CONTROL EQUIPMENT up to
2-STAGE Cooling
3-STAGE Heating
2-SPEED Fan
Humidity

LED Status Lights QUICKLY indicate Equipment Calls & Equipment Transformer

HEAT PUMP or GAS/ELECTRIC SYSTEMS
DUAL FUEL CAPABILITY
Including Settable Balance Points

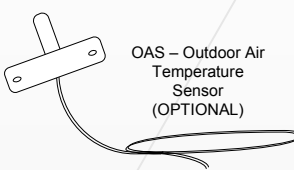
SUPPLY AIR TEMP SENSOR with plug-in connector INCLUDED

Adjustable Time/Temp FRESH AIR CONTROL

2-WIRE DAMPERS (POWER CLOSE/SPRING OPEN) and **3-WIRE DAMPERS** (POWER OPEN/POWER CLOSE) **2-Color LEDs** Indicate Damper position

COMMUNICATION and POWER TERMINALS for connecting additional Zones (E1 & E4)

24VAC Terminal with LED indicator



ecojay SmartZone, the SMART choice.

Included with SmartZonePLUS-MC

- Plastic Enclosure with wire knockouts and multiple mounting options
- Supply Air Temperature Sensor Probe
- SmartZonePLUS Install Guide
- Superior 5-Year Limited Factory Warranty

MORE INFORMATION AVAILABLE ONLINE

ecojay.com

SPECIFICATIONS

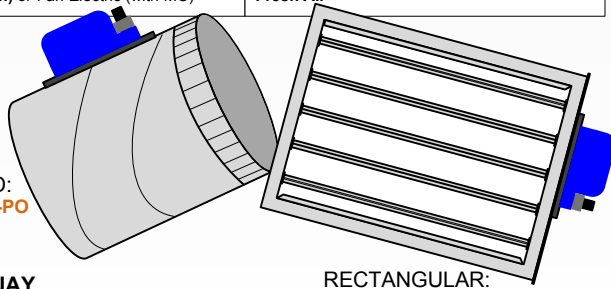
POWER	ZCSZP-MC	14VA MAX (350 mA @ 24VAC)
	SYSTEM	14VA + Thermostat (3VA) + Damper (3 to 10 VA) = Total Transformer Size
	PROTECTION	Integrated Electronic Auto-Reset Fused links (Field supplied transformer should also be fused)
OUTPUTS	EQUIPMENT	2 AMP @ 24VAC Contact Rating RH – 24VAC HOT from Heating Transformer on Equipment (RED) RC – 24VAC HOT from Cooling Transformer on Equipment (RED) C – 24VAC COMMON from Transformer on Equipment (none) Y1 – 1 st Stage Compressor (YELLOW) Y2 – 2 nd Stage Compressor (YELLOW) G – Fan (GREEN) W1/EH – 1 st Stage Heat OR Emergency Heat (RED) W2/OB – 2 nd Stage Heat OR Reversing Valve (RED) G2/H – High Speed Fan OR Humidity Control (ORANGE)
	DAMPERS	10 AMP @ 24VAC Contact Rating (40VA) Power-Close / Spring-Open Dampers (10VA) Power-Open / Spring-Close Dampers (10VA) Power-Open / Power-Close Dampers (3VA)
	COMMUNICATION	COMM – 3 wire reliable communications to MC (BLUE) [Use Cat5 Cable ONLY] RS485 – External RS485 port for PC or automation system interface
INPUTS	THERMOSTAT	LABEL – DESCRIPTION (LED COLOR) R – 24VAC HOT (RED) C – Common (NONE) Y1 – 1 st Stage Compressor (YELLOW) Y2 – 2 nd Stage Compressor (YELLOW) G – Fan (GREEN) W1/EH – 1 st Stage Heating OR Emergency Heat (RED) W2/OB – 2 nd Stage Heating OR Reversing Valve (ORANGE) H – Humidity Control (Orange)
	ECONOMY	CE INPUT – System Wide Economy Mode (RED)
	TEMPERATURE	10K Type III Thermistor SA Sensor – Supply Air Temperature Sensor (Provided with MC) OA Sensor – Outdoor Air Temperature Sensor (Optional)
CONFIGURATION	DIP SWITCHES	Gas/Electric or Heat Pump Reversing Valve O or B Normal or Dual Fuel for Heat Pump Priority for ALL Zones or for Zone ONE Allow 2 nd Stage ALWAYS or ONLY with 20% Calling Zones Opposing Call Time Dynamic % Changeover or Fixed time Multi-Speed Fan Control or Humidity Control Fan Gas (with plenum switch) or Fan Electric (with MC)
	DISPLAY MENU	Supply Air Temperature Outdoor Temperature Zones calling for Heat/Cool Total Zones Change Over time Low Temp / High Temp Cutouts Humidify / Dehumidify Fresh Air

OTHER REFERENCES

- ECOJAY SmartZonePLUS-E1/E4 Spec Sheet
- ECOJAY SmartZonePLUS Install Guide for quick step by step process for installation
- ECOJAY SmartZone System Manual for a full guide to ECOJAY Zoning products
- ECOJAY SmartZone Troubleshooting Guide for additional support
- References available at ecojay.com or by calling 1-888-523-ECOJ



DAMPERS AVAILABLE IN OVER 60 DIFFERENT SIZES AND STYLES



ECOJAY PART NUMBERS

ZONE CONTROLS	Up to 8 ZONES	ZCSZ-2X	SmartZone-2X	2-Zone Controller w/ Supply Sensor
		ZCSZ-4X	SmartZone-4X	4-Zone Controller w/ Supply Sensor
		ZCSZ-8X	SmartZone-8X	8-Zone System (Using 4X4 LINK) w/ Supply Sensor
		ZCSZ-KIT#	SmartZone-KIT	Order by # of zones, up to 8 Zones
ZONE CONTROLS	Up to 33 ZONES	ZCSZP-MC	SmartZonePLUS-MC	Main Controller (Controls Equipment & Zone 1) w/ Supply Sensor
		ZCSZP-E1	SmartZonePLUS-E1	1-Zone Expander Module (for use with SZP-MC)
		ZCSZP-E4	SmartZonePLUS-E4	4-Zone Expander Module (for use with SZP-MC)
DAMPERS	SUPPLY	DASRO-SO	Supply ROUND – Spring Open	Spring Open (Fail Open)/ Power Close Round Supply Damper
		DASRO-PO	Supply ROUND – Power Open	Power Open/ Power Close Round Supply Damper
		DASRE-PO	Supply RECTANGULAR – Power Open	Power Open/ Power Close Rectangular Supply Damper
	BYPASS	DABRO-SPC	Bypass ROUND – SPC	Static Pressure Controlled Round Bypass Damper
		DABRE-SPC	Bypass RECTANGULAR – SPC	Static Pressure Controlled Rectangular Bypass Damper
		DABRO-B	Bypass ROUND – Barometric	Barometric (Weight-Arm) Controlled Round Bypass Damper

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MORE INFORMATION ABOUT THESE PRODUCTS AVAILABLE ONLINE

