BAPI WIRELESS SYSTEM OUTPUT MODULES

BA/COM, BA/ROM, BA/RYOM, BA/RYOL, BA/SOM, BA/VOM

DESCRIPTION

The BAPI BA/ROM, VOM, COM, and RYOM wireless system output modules are specifically designed to connect to any BA/RCV receiver and communicate over an RS485 communication trunk to generate standard output signals for any BAS system. A total of 127 modules may be interspersed on the RS485 trunk. Each will output a signal representative of its assigned remotely located wireless transmitter. Each module may be powered from the receiver power bus, or individually, based on overall system power requirements.

The BAPI BA/ROM thermistor simulation output module converts a wireless transmitter temperature signal according to a standard thermistor curve. The three standard curves are 10 K Ω Type 3, a 10 KΩ Type 2, with a resistance temperature response of 35° to 120°F (1° to 50°C) and a 20 K thermister curve with response of 50° to 120°F (12° to 50°C).

The BAPI BA/VOM voltage output module converts a wireless transmitter temperature signal to a standard voltage signal. The two standard voltage outputs are 0-5 VDC and 0-10 VDC, with voltage temperature responses based on individual models.

The BAPI BA/COM current output module converts a wireless transmitter temperature signal to a standard 4-20 mA current signal. The 4-20 mA current is typical of a loop powered (9-36 VDC) device with current temperature responses based on individual models.

The BAPI BA/RYOM digital output module converts the pushbutton on a wireless room temperature transmitter to a solid-state relay momentary closure for AC or DC voltages (5 second momentary actuation). NO or NC solid-state contacts are available, based on individual models.

The BAPI BA/RYOL digital output module converts the BA/WDI digital input transmitter signal to a latching relay output. NO or NC fail safe contacts are available, based on individual models.

The BAPI BA/SOM setpoint output module converts the setpoint data received to a resistance or voltage output.





BA/SOM-16-EZ BA/VOM-05-C-EZ BA/ROM-102-EZ





FEATURES

- Provide BAS point wiring
- 127 modules per system
- Thermistor simulation for temperature
- 0-10 VDC, 0-5 VDC, or 4-20 mA signals
- Solid-state contacts
- Built-in fail-safe on signal loss
- Snap-track and DIN rail mounting

SPECIFICATIONS

DEVICE OPERATION Supply Voltage

Most modules powered from BA/RCV receiver VOM, ROM Powered from reciever bus RYOx. SOM Powered from reciever bus COM 9-36 VDC from current loop

Output RS485 bus to a maximum of 127 "Output

Modules'

BA/VOM-xx 0-5V or 0-10V @10KO BA/COM-xx 4-20mA, 750O @24VDC

0-5V or 0-10V @10KO, or Resistance 0-75K BA/SOM-xx BA/ROM-xxx Thermistor (10K-2, 10K-3, 20K)

Momentary, Triac, 40V AC/DC, 150mA, 1µA BA/RYOM

leakage

Latching, Triac, 40V AC/DC, 150mA, 1µA leakage

LED blinks on each reception Indication A/D resolution

10 bit, 1024 counts"

Mounting DIN rail or 2 screws to back plane **Output modules** plug into the right side of receiver and/or other output modules Wiring 2 field terminals, 22-16 AWG RS485 Comm. trunk 6 terminals or plug 32 to 140°F (0 to 60°C) Operating Temperature

Operating Humidity 5-95% RH non-condensing Construction ABS Plastic, UL94V-0 **Enclosure Rating** Indoor, NEMA 1 2.75"H x 2.34"W x 1.2"D Dimensions

(7.0 x 5.9 x 3.0 cm) Weight 0.3 lb (0.14 Kg)

Warranty

RADIO/RADIO RECEIVER INTERFACE

Update Interval Updates on each reception

Lost Comm. Fail Safe If no reception >15 minutes modules fail safe

BA/VOM-xx °F Fails low and %RH Fails high BA/COM-xx °F Fails low and %RH Fails high

BA/SOM-xx °F Fails low BA/ROM-xx °F Fails low

BA/RYOM Fails to the normal condition per order

(NO or NC)

BA/RYOL Fails to the normal condition per order

(NO or NC)

Push button on "Transmitter/Output Module" Programming simultaneously

Approvals

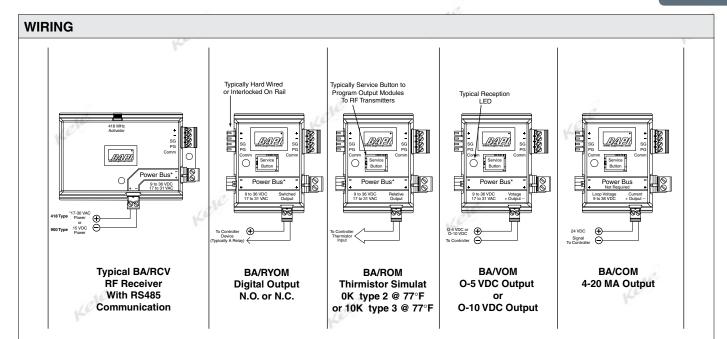
RoHS

BA/RYOL



BA/COM, BA/ROM, BA/RYOM, BA/RYOL, BA/SOM, BA/VOM





*The power bus maybe split when needed and is required when module current draw exceeds the system power supply. If the power bus is split re-established with an indendently power source. Do not parallel power sources.

ORDERING INFORMATION

BA/COM-E-EZ BA/COM-H-EZ BA/COM-KK-EZ BA/COM-M-EZ BA/COM-AO-EZ BA/ROM-102-EZ BA/ROM-103-EZ BA/ROM-20-EZ BA/RYOM-NC-EZ BA/RYOM-NC-EZ BA/SOM-10-EZ BA/SOM-60-EZ BA/VOM-10-C-EZ BA/VOM-10-E-EZ	emperature current output module, 4-20 mA = 50°F to 90°F emperature current output module, 4-20 mA = 60°F to 80°F emperature current output module, 4-20 mA = -20°F to 120°F emperature output module, 4-20 mA = -32°F to 185°F umidity current output module, 4-20 mA = 0 to 100% RH ull scale temperature output module, 4-20 mA = 32°F to 185°F = BA/WAI full scale input emperature thermistor simulation output module, 10K type 24 (35°F to 120°F) emperature thermistor simulation output module, 10K type 3 (32°F to 120°F) hermistor simulation output module, 20K (HNWL) 53°F to 120°F elay output momentary, normally open output (Used with push button override)
BA/COM-E-EZ BA/COM-H-EZ BA/COM-KK-EZ BA/COM-M-EZ BA/COM-AO-EZ BA/ROM-102-EZ BA/ROM-103-EZ BA/ROM-20-EZ BA/RYOM-NC-EZ BA/RYOM-NC-EZ BA/SOM-10-EZ BA/SOM-60-EZ BA/VOM-10-C-EZ BA/VOM-10-E-EZ	emperature current output module, 4-20 mA = 60°F to 80°F emperature current output module, 4-20 mA = -20°F to 120°F emperature output module, 4-20mA = 32°F to 185°F lumidity current output module, 4-20 mA = 0 to 100% RH ull scale temperature output module, 4-20mA = 32°F to 185°F = BA/WAI full scale input emperature thermistor simulation output module, 10K type 24 (35°F to 120°F) emperature thermistor simulation output module, 10K type 3 (32°F to 120°F) hermistor simulation output module, 20K (HNWL) 53°F to 120°F
BA/COM-H-EZ BA/COM-KK-EZ BA/COM-M-EZ BA/COM-AO-EZ BA/ROM-102-EZ BA/ROM-103-EZ BA/ROM-20-EZ BA/RYOM-NC-EZ BA/RYOM-NC-EZ BA/SOM-10-EZ BA/SOM-60-EZ BA/VOM-10-C-EZ BA/VOM-10-E-EZ	emperature current output module, 4-20 mA = -20°F to 120°F emperature output module, 4-20mA = 32°F to 185°F lumidity current output module, 4-20 mA = 0 to 100% RH ull scale temperature output module, 4-20mA = 32°F to 185°F = BA/WAI full scale input emperature thermistor simulation output module, 10K type 24 (35°F to 120°F) emperature thermistor simulation output module, 10K type 3 (32°F to 120°F) hermistor simulation output module, 20K (HNWL) 53°F to 120°F)
BA/COM-M-EZ H BA/COM-AO-EZ FI BA/ROM-102-EZ TE BA/ROM-103-EZ TE BA/ROM-20-EZ TE BA/RYOM-NC-EZ R BA/RYOM-NC-EZ R BA/SOM-10-EZ S BA/SOM-60-EZ S BA/VOM-10-C-EZ TE BA/VOM-10-E-EZ TE	lumidity current output module, 4-20 mA = 0 to 100% RH ull scale temperature output module, 4-20mA = 32°F to 185°F = BA/WAI full scale input emperature thermistor simulation output module, 10K type 24 (35°F to 120°F) emperature thermistor simulation output module, 10K type 3 (32°F to 120°F) hermistor simulation output module, 20K (HNWL) 53°F to 120°F
BA/COM-M-EZ H BA/COM-AO-EZ FI BA/ROM-102-EZ TE BA/ROM-103-EZ TE BA/ROM-20-EZ TE BA/RYOM-NC-EZ R BA/RYOM-NC-EZ R BA/SOM-10-EZ S BA/SOM-60-EZ S BA/VOM-10-C-EZ TE BA/VOM-10-E-EZ TE	lumidity current output module, 4-20 mA = 0 to 100% RH ull scale temperature output module, 4-20mA = 32°F to 185°F = BA/WAI full scale input emperature thermistor simulation output module, 10K type 24 (35°F to 120°F) emperature thermistor simulation output module, 10K type 3 (32°F to 120°F) hermistor simulation output module, 20K (HNWL) 53°F to 120°F
BA/ROM-102-EZ BA/ROM-103-EZ BA/ROM-20-EZ BA/RYOM-NC-EZ BA/RYOM-NO-EZ BA/SOM-10-EZ BA/SOM-60-EZ BA/VOM-10-C-EZ BA/VOM-10-E-EZ	emperature thermistor simulation output module, 10K type 24 (35°F to 120°F) emperature thermistor simulation output module, 10K type 3 (32°F to 120°F) hermistor simulation output module, 20K (HNWL) 53°F to 120°F
BA/ROM-103-EZ BA/ROM-20-EZ BA/RYOM-NC-EZ BA/RYOM-NO-EZ BA/SOM-10-EZ BA/SOM-60-EZ BA/VOM-10-C-EZ BA/VOM-10-E-EZ	emperature thermistor simulation output module, 10K type 3 (32°F to 120°F) hermistor simulation output module, 20K (HNWL) 53°F to 120°F
BA/ROM-103-EZ BA/ROM-20-EZ BA/RYOM-NC-EZ BA/RYOM-NO-EZ BA/SOM-10-EZ BA/SOM-60-EZ BA/VOM-10-C-EZ BA/VOM-10-E-EZ	emperature thermistor simulation output module, 10K type 3 (32°F to 120°F) hermistor simulation output module, 20K (HNWL) 53°F to 120°F
BA/RYOM-NC-EZ R BA/RYOM-NO-EZ R BA/SOM-10-EZ S BA/SOM-60-EZ S BA/VOM-10-C-EZ W BA/VOM-10-E-EZ W	
BA/RYOM-NO-EZ R BA/SOM-10-EZ S BA/SOM-60-EZ S BA/VOM-10-C-EZ W BA/VOM-10-E-EZ W	alow output mamontary, parmally open output (Head with puch button override)
BA/SOM-10-EZ S BA/SOM-60-EZ S BA/VOM-10-C-EZ W BA/VOM-10-E-EZ W	elay output momentary, normany open output (oseu with push button overnue)
BA/SOM-60-EZ S BA/VOM-10-C-EZ W BA/VOM-10-E-EZ W	elay output momentary, normally closed output (used with push button override)
BA/VOM-10-C-EZ V BA/VOM-10-E-EZ V	etpoint full scale output module, 0 to 10 VDC output
BA/VOM-10-E-EZ	etpoint full scale output module, 0 to 10K Ω output
	oltage output module, 0-10 VDC = 50°F to 90°F
DA 0/014 40 11 ET	oltage output module, 0-10 VDC = 60°F to 80°F
BA/VOM-10-H-EZ	oltage output module, 0-10 VDC = -20°F to 120°F
BA/VOM-10-KK-EZ	emperature voltage output module, 0-10VDC = 32°F to 185°F
BA/VOM-10-M-EZ	oltage output module, 0-10 VDC = 0 to 100% RH
BA/VOM-10-AO-EZ	ull scale temperature voltage output module, 0-10VDC = 32°F to 185°F
BA/RYOL-NC-EZ	
BA/RYOL-NO-EZ	elay output latching, normally closed fail safe (used with BA/WDI to follow DI input)

RELATED PRODUCTS

BA/VC350A-15 Power supply 24 VAC to 15 VDC, 350 mA **BA/AOM-CONN** Pluggable terminal block kit **DCPA-1.2** Power supply, 120 VAC In to 24 VAC/24 VDC Out 691-K0A Control transformer, 120:24 VAC, 40 VA, Class 2

DCP-1.5-W Power supply, 24 VAC IN to 24 VDC OUT