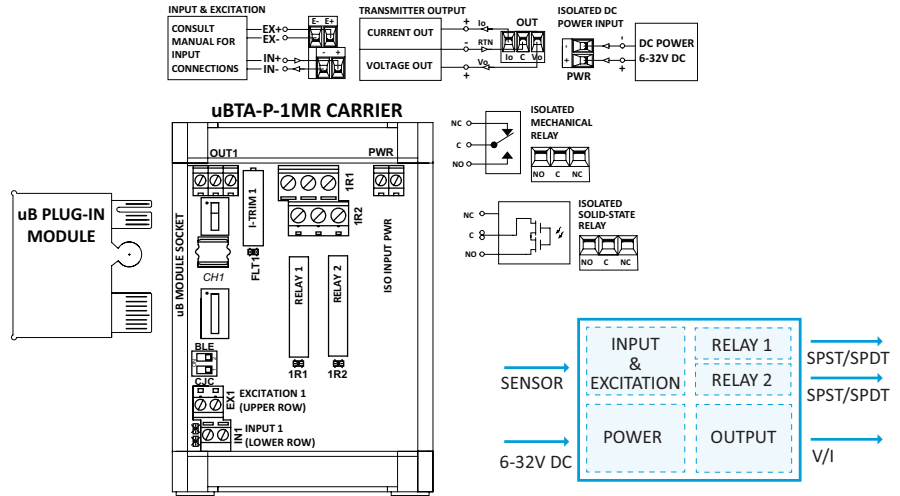
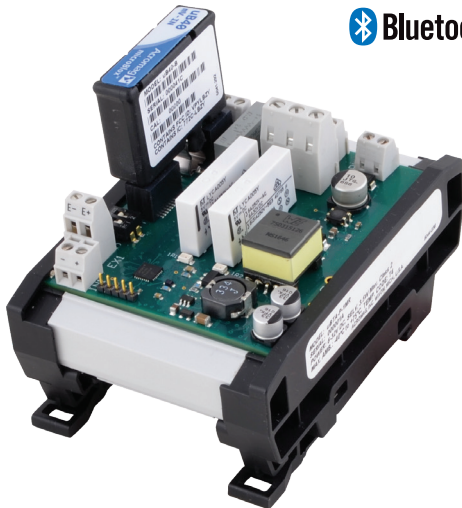


# Transmitting Alarms: microBlox® Series

uBTA-P-1 Series microBlox® Transmitter and Alarm Carrier



Two alarm relay outputs ◆ 0/4-20mA and 0/1-5V transmitter output ◆ Bluetooth® wireless configuration

## Description

### Models

uBTA-P-1MR: Single channel transmitter/alarm, mechanical relays.

uBTA-P-1SR: Single channel transmitter/alarm, solid-state relays.

The uBTA carriers are used with Acromag's microBlox® signal conditioning modules to create powerful alarms that also provide a voltage/current transmitter output. The plug-in modules offer the convenience of wireless field programming on a smartphone or tablet.

The microBlox uB modules offer a flexible space-saving solution for isolating, monitoring, and converting industrial sensor signals to interface with your data acquisition or control system. By inserting a uB input module into the carrier, you get a device with both alarm and transmitter capabilities. With a broad selection of uB input modules, you can monitor many different signal types by simply interchanging modules on the carrier.

Plug-in modules measure current, voltage, thermocouple, or RTD input. Carriers produce a process current and voltage output signal and trip alarm relays if high or low limits are exceeded. Each alarm carrier has two

independent relay outputs (either mechanical or solid-state).

Bluetooth wireless technology enables configuration using an Android™ or iOS® mobile device. Acromag's Agility™ app helps you quickly set input/output ranges and scaling to your specific requirements. It is also fast and easy to configure your alarm setpoints. You can define two high limits, low limits, or window alarms for each relay.

These rugged carriers are well-suited for use in harsh industrial environments. Carriers mount on T-type DIN rails for high-density installation. They have high immunity to noise, surges, shock, vibration, and extreme temperatures. Installation in hazardous locations is also supported with compliance to CE, ATEX, and UL regulations.

## Key Features & Benefits

- Dual alarms (hi/hi, lo/lo, hi/lo) with two independent mechanical or solid-state relays
- Mechanical relays switch 5A at 250V AC, 30V DC
- Transmitter output with scalable 0-20mA, 4-20mA, and 0-5V signal ranges
- Interchangeable input modules for measuring a wide variety of signal types
- Easy configuration using Bluetooth wireless technology with smartphone or tablet running Acromag Agility app for Android® and iOS®
- Rugged design for use in harsh environments
- High accuracy alarm and transmitter output
- High noise immunity and stability
- High voltage isolation between input, output, relay contacts, and power
- All I/O and power ports transient-protected
- Wide -40 to 75°C operating range
- CE compliant. UL/cUL Class I Div 2, ATEX / IECEx Zone 2 approvals.



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# Transmitting Alarms: microBlox® Series

## uBTA-P-1 Series microBlox® Transmitter and Alarm Carrier

### Performance Specifications

#### Analog Field Input

##### Field Range

See specs for the specific plug-in uB module used.

[www.acromag.com/microBlox](http://www.acromag.com/microBlox)

#### Alarm Relay Output

##### Relay

Two independent relays. Each relay may have its own set-point, dead-band and reverse acting status setting.

##### Models: uBTA-P-1MR

Type: Dual 1 FORM C, (SPDT, normally open and normally closed) mech. relays. 5A, 250V AC, 30V DC.

##### Models: uBTA-P-1SR

Type: Dual 1 FORM A, (SPST, normally open) solid-state relays. 1A, 200V peak AC/DC.

#### Transmitter Output

Simultaneous 0 to 5V / 1 to 5V,  
0 to 20mA / 4 to 20mA

#### General

##### Power

Connect 6-32V DC SELV (Safety Extra Low Voltage), up to 1.8W including modules. Current draw will be dependent on carrier model, relay type, whether you utilize the transmitter output, your plug-in module, and your voltage level. See manual for more information.

##### Accuracy

Better than ±0.1%. typical

#### Physical

##### Dimensions

Width: 2.66" (67.6 mm)

Height: 2.83" (72.0 mm)

Depth: 1.42" (36.0 mm) without modules, 2.8" (71 mm) with uB module

Weight: 0.25 lbs. (0.114 Kg)

##### I/O Connectors

Fixed type terminal blocks rated for 5A/250V; AWG #28-16, stranded or solid copper wire.

##### Case

Self-extinguishing polyamide, UL94 V-0 rated, color light gray. General purpose NEMA Type 1 enclosure.

##### Circuit Board

Military grade fire-retardant epoxy glass per IPC-4101/98

##### DIN-Rail Mounting

T-type DIN rails

#### Environmental

##### Operating Temperature

-40 to 75°C (-40° to 158°F)

##### Storage Temperature

-40 to 85°C (-40° to 185°F)

##### Relative Humidity

5 to 95% non-condensing

##### Emissions

Class B product with emissions per BS EN 61000-6-4

##### Approvals

CE compliant. Designed for UL/cUL Class I Division 2 Groups ABCD, ATEX / IECEx Zone 2

#### Configuration using Agility™ Config. Tool via Bluetooth technology

The Acromag Agility™ configuration tool is a mobile application that allows easy setup, calibration, and reconfiguration of microBlox I/O modules.

This mobile app. supports smart devices with Android 4.3 or later or iOS 5.0 or later. You can download the Agility application free of charge from the Google Play™ store at [play.google.com](http://play.google.com) (Android), or the Apple® App Store® at [itunes.apple.com](http://itunes.apple.com) (Apple iOS).



### Ordering Information

#### uBTA-P-1MR

Single transmitter/alarm, mechanical relays.

#### uBTA-P-1SR

Single transmitter/alarm, solid-state relays.

### Accessories

#### DIN Rail 3.0

DIN Rail Strip, Type T, 3 inches

#### DIN Rail 16.7

DIN Rail Strip, Type T, 16.7 inches

### Plug-In Analog Field Input Modules

#### uB30-B

DC millivolt input, 5Hz bandwidth;  
Configurable ±100mV

#### uB40-B

DC millivolt input, 1kHz bandwidth;  
Configurable ±100mV

#### uB31-B

DC voltage input, 4Hz bandwidth;  
Configurable ±1 to ±60V

#### uB41-B

DC voltage input, 1kHz bandwidth;  
Configurable ±1 to ±60V

#### uB32-B

DC current input;  
Configurable 0-20mA

#### uB42-B

DC current input with 2-wire transmitter loop  
excitation; Configurable 0-20mA

#### uB34-B

Pt RTD input, 2 or 3-wire;  
Configurable 0-600°C

#### uB35-B

Pt RTD input, 4-wire;  
Configurable 0-600°C

#### uB37-B

Thermocouple input, non-linearized;  
Configurable Type J,K,T,R,E,S

#### uB47-B

Thermocouple input, linearized;  
Configurable Type J,K,T,R,E,S

See [Acromag.com/microBlox](http://Acromag.com/microBlox) for more information

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