

RELIABILITY

FLEXIBILITY

FAST DELIVERY

ENGINEERING  
SUPPORT

ONE STOP  
I/O SHOP



8400674H

## DISTRIBUTED I/O AND SIGNAL CONDITIONERS



Ethernet, Modbus, Profibus I/O



Transmitters, Isolators, Splitters



Limit Alarms / Computation



I/O Modules





*Experience counts:  
especially when  
you are selecting  
an I/O partner.  
And with 60+ years  
of I/O experience,  
Acromag can help  
you to improve  
reliability, increase  
productivity and  
reduce your costs.*



ISO9001  
AS9100



EtherNet/IP®



MEASUREMENT, CONTROL & AUTOMATION ASSOCIATION



# Depend on Acromag



## Acromag: The I/O Leader

Acromag is a customer-driven manufacturer focused on developing process automation I/O products that provide the best long term value in the industry. Compare and you'll find that Acromag products offer an unmatched balance of price, performance, and features.

## 60+ Years of I/O Experience

Acromag has more than 60 years of measurement and control experience. Since 1957, we have delivered nearly a million units to thousands of customers around the globe for manufacturing, power, environmental, transportation, and military applications.

## Top Quality and a 2-Year Warranty

We take every measure to guarantee you dependable operation and products that perform at or beyond their specifications. Our state-of-the-art manufacturing and military-grade components add an extra degree of ruggedness. Most products qualify for an extended 2-year warranty. And with ISO 9001/AS9100 certified quality control, you get full confidence.

*All trademarks are the property of their respective owners.*

## Online Ordering

For your convenience, Acromag provides full product documentation and pricing information on our website. You can obtain quotes or even place your order directly on our website.

## Fast Delivery from Stock

Most products can be shipped within 24 hours of receiving your order.

## Special Services

We are happy to accommodate your special requirements and offer the following services:

- custom product development
- custom calibration
- source inspections, quality audits
- special shipping, documentation
- protective humiseal coating
- plastic and stainless steel tagging

## Certification and Approvals

Many Acromag products carry globally recognized agency approvals and safety certifications.

- CE
- UL, cUL
- ATEX
- CSA
- Ethernet conformance
- Modbus conformance
- Profibus certification
- IECEx

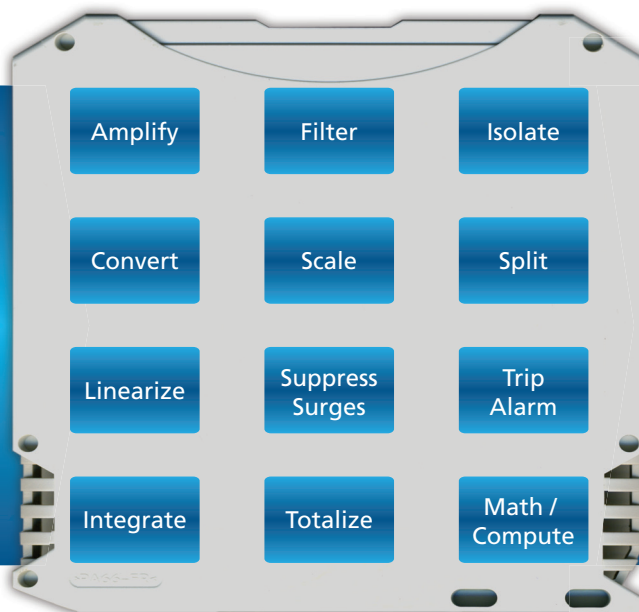
# Industrial Input/Output Solutions



## I/O MODULES

### INPUT SIGNALS

Voltage AC/DC  
Current AC/DC  
Thermocouple  
RTD / Resistance  
Frequency  
Thermistor  
Strain / Load Cell  
Pot / Slidewire  
Discrete Sensors



### OUTPUT SIGNALS

DC Voltage  
DC Current  
Relay  
Solid-State Switch  
Frequency  
Pulse Width Modulation  
Display / Readout

## COMMUNICATION

Ethernet  
Modbus  
Profibus  
Peer-to-Peer

## NETWORK I/O & DATA ACQUISITION

### Ethernet I/O



[www.Acromag.com/EthernetIO](http://www.Acromag.com/EthernetIO)

### Modbus I/O



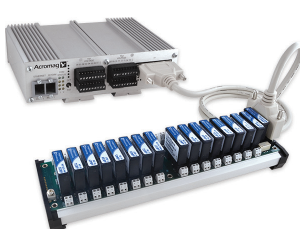
[www.Acromag.com/Modbus](http://www.Acromag.com/Modbus)

### Profibus I/O



[www.Acromag.com/Profibus](http://www.Acromag.com/Profibus)

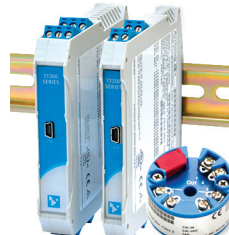
### I/O Modules



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

## SIGNAL CONDITIONERS

### Transmitters



[www.Acromag.com/Transmitters](http://www.Acromag.com/Transmitters)

### Isolators / Splitters



[www.Acromag.com/Isolators](http://www.Acromag.com/Isolators)

### Limit Alarms



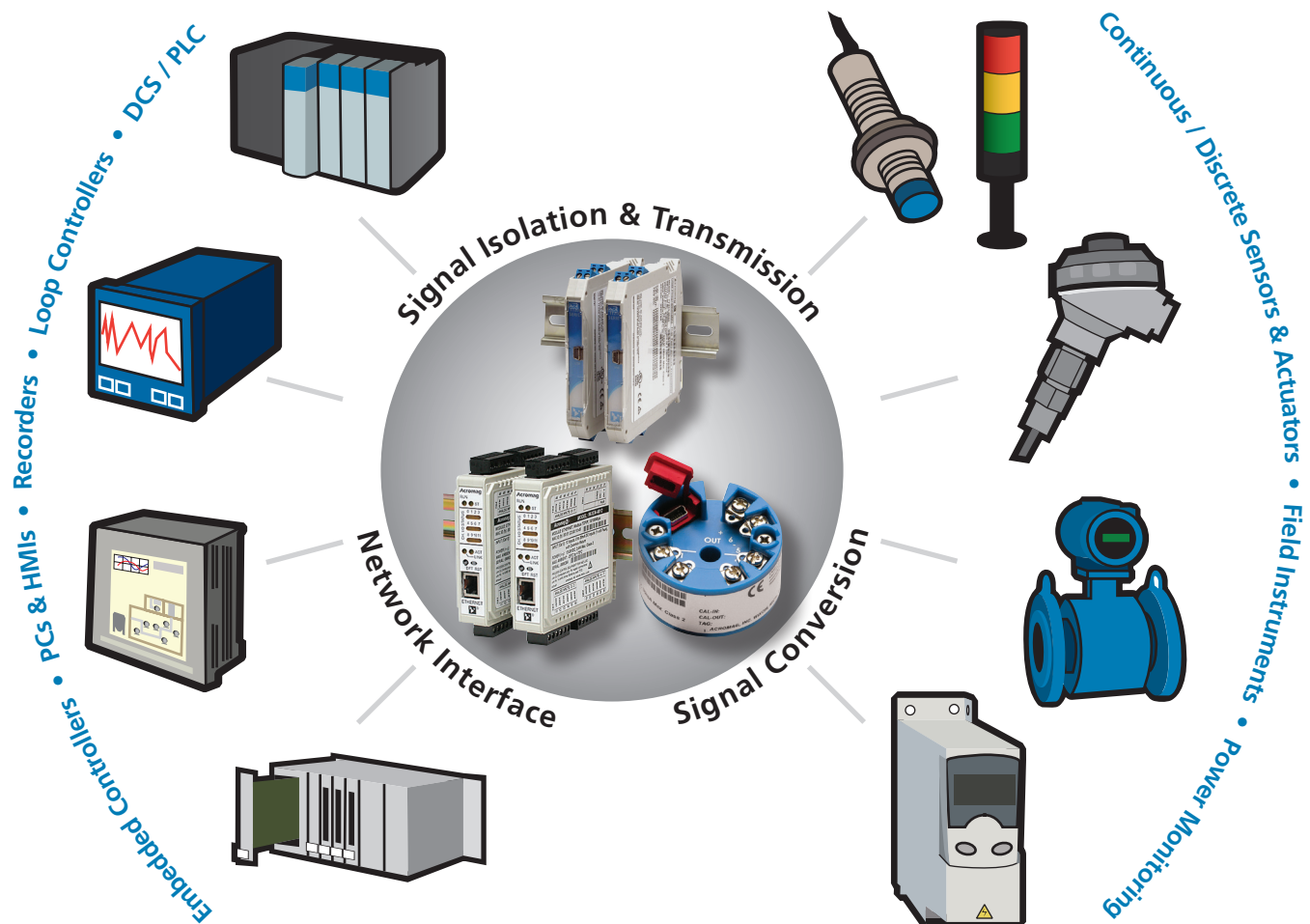
[www.Acromag.com/Alarms](http://www.Acromag.com/Alarms)

### Computation



[www.Acromag.com/Computation](http://www.Acromag.com/Computation)

# Signal Interfacing Solutions



## How Acromag I/O Is Used

Acromag I/O is ideal for a broad range of monitoring and control operations where controllers communicate with instrumentation on the plant floor or in the field.

### Acromag Advantages

- Wide operating temperature ranges (up to -40 to 85C°).
- High resistance to RFI, EMI, surges, electrical transients.
- High-voltage isolation and built-in surge suppression.
- Easy to use and maintain.
- High channel density to save space.
- Large inventory of stock items for same day shipping.
- Special designs and custom services available.
- 2-year warranty available at no extra cost
- AS9100 and ISO 9001 certified quality management

### Operation in All Locations

- Safe zones and hazardous locations (Zone 2).
- Explosion-proof locations (Zone 1).
- Approvals from CE, UL/cUL, FM, CSA, ATEX, IECEx.

### Controller Interface

- PLCs, PACs, controllers
- DCS distributed control systems
- PCs, embedded computers, SCADA systems
- Operator interface terminals and remote terminal units

### Continuous Sensors

- |               |                 |
|---------------|-----------------|
| • Temperature | • Pressure      |
| • Flow        | • Level         |
| • Speed       | • Weight / load |
| • Position    | • Drives        |

### Discrete Sensors and Switches

- |                |                 |
|----------------|-----------------|
| • Dry contacts | • PNP, NPN      |
| • Solid-state  | • Proximity     |
| • Valves       | • Lights, horns |

### Actuators and Analytical Instruments

- |                        |                        |
|------------------------|------------------------|
| • Drives, motors       | • Power supplies       |
| • Heaters, coolers     | • Valves, positioners  |
| • Displays, indicators | • Recorders, analyzers |





## Raw Materials Processing

These industries rely on Acromag process instruments for accurate and repeatable measurements from sensor signals.

- Chemical, petrochemical
- Metal, glass, ceramic
- Pulp, paper, textile



## Factory Automation

Fast response times, high reliability, and proven compatibility with control networks make Acromag I/O popular for use on assembly lines.

- Food, beverage, pharmaceutical
- Automotive, electronic assembly
- Building automation, HVAC



## Oil, Gas, and Mining

Built for operation in extreme environments, Acromag I/O reliably interfaces sensors to actuators and controllers.

- Exploration, extraction
- Production
- Distribution



## OEM Machine Control

High channel density plus shock and vibration immunity help machine builders add more I/O to monitor and control their equipment.

- Semiconductor, lithography
- Boilers, furnaces, generators
- Test stands, industrial machinery



## Power Generation

Able to resist noise and surges from high-voltage electrical sources, Acromag I/O delivers dependable data to plant control systems.

- Fossil fuels, hydroelectric, nuclear
- Solar, wind, geothermal
- Fuel cells, batteries



## Defense, Security, and Aerospace

Acromag I/O finds a home in many military and security systems due to their ability to operate over wide temperature ranges.

- Simulators and trainers
- Ground / airborne / naval controls
- Surveillance systems



## Water / Wastewater

Offering outstanding value and easy installation, Acromag I/O is the first choice of many municipalities to help manage their water systems.

- Municipal
- Industrial
- Desalinization
- Irrigation



## Research and Development

When high-resolution and high-accuracy measurements are required, Acromag I/O ensures precise data collection.

- Test and measurement systems
- Data acquisition systems
- Scientific research
- Quality control/assurance

# Network I/O & Data Acquisition



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

## BusWorks® XT Series

High-performance, space-saving remote, analog and discrete I/O modules - with Xtra Technology - for Ethernet networks.

- Ethernet/IP, Profinet, Modbus TCP/IP, and i2o peer-to-peer communication
- Easy PC/Windows configuration via USB
- Redundant and bussed DC power



[www.acromag.com/  
BusWorks900](http://www.acromag.com/BusWorks900)

## BusWorks® 900 Series

A series of dependable, yet economical, remote analog and discrete I/O modules for Ethernet or RS485 networks.

- Ethernet/IP, Modbus TCP/IP, i2o peer-to-peer, Modbus-RTU, and Profibus-DP communication
- Easy configuration using Internet browser or Windows software



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

## EtherStax® ES2000 Series

High-density I/O blocks designed for high-reliability operation in Ethernet networks.

- Modbus TCP/IP, UDP/IP, and i2o peer-to-peer communication
- Up to 96 channels of discrete or analog I/O in a vertically-stackable unit with a small footprint
- Fast scan rates (below 1 millisecond)
- Redundant power and communication



[www.acromag.com/i2o](http://www.acromag.com/i2o)

## Peer-to-Peer Communication

Many Acromag I/O modules have i2o technology for "input-to-output" peer-to-peer over Ethernet.

- Automatically transmits analog or discrete I/O information between modules
- Wire-saver, mux/de-mux, splitter tasks



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

## Channel-to-Channel Isolated I/O Modules

Ethernet-enabled panel mounted signal conditioners with BusWorks or EtherStax I/O.

- Connect uB backpanels to Acromag Ethernet I/O with DB25 cable
- Over 170 low-cost, high-isolation models
- Up to 1500V AC isolation per channel



[www.acromag.com/  
software-tools](http://www.acromag.com/software-tools)

## Software Tools

- OPC, .NET, ActiveX, Visual Basic/C++
- Function libraries with C source code
- Compatible with Windows, Linux, VxWorks, QNX, OS-9, and other OSs



## Ethernet Switches

- Unmanaged
- Gigabit fiber
- 10/100/1000 RJ45
- up to 8 ports



# Signal Conditioning Solutions



**NEW!**



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

## DT230/330 Series

A high-performance line of programmable dual-channel transmitters.

- Easy configuration via USB with Windows software or Agility App™ for Android
- Wide variety of input, output, and power configurations

**NEW!**



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

## SP230/330 Series

A high-performance line of signal splitters / duplicators offering precise scaling of I/O ranges.

- Easy configuration via USB with Windows software or Agility App for Android
- Wide variety of input, output, and power configurations



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

## TT230/330 Series

A high-performance line of thin transmitters and isolators offering great flexibility.

- Easy configuration via USB with Windows software or Agility App for Android
- Wide variety of input, output, and power configurations



[www.acromag.com/ST130](http://www.acromag.com/ST130)

## ST130 Series

Low-cost, miniature head-mount (DIN Form B) transmitters that deliver outstanding accuracy, linearity and stability.

- Easy PC/Windows configuration via USB
- Inputs: temperature, voltage, ohmic
- Output: 4-20mA DC (sink)



[www.acromag.com/600T](http://www.acromag.com/600T)

## 600T Series

Select from a broad line of isolators, splitters, and transmitters.

- Auto-configuration and self-ranging models for easy setup
- Wide variety of input, output, and power configurations

**NEW!**



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

## microBlox® Series

High-performance solution for interfacing sensors and field devices with data acquisition systems.

- Bluetooth® wireless technology enabled
- User-configurable I/O ranges
- Alarm and input polling/trending capabilities



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

## IntelliPack® 800 Series

Intelligent, programmable series of transmitters, math modules, and alarms.

- PC configuration, push-button adjust
- Wide variety of input, output, and power configurations



## Accessories and Services

- Panel meters, power supplies
- Mounting and wiring accessories
- Coatings, tags, certificates, drawings



# Transmitters: DT230/330 Series



## New DT230/330 Series Dual-Channel Programmable Transmitters

### New Product Announcement

Acromag's new DT Series transmitters are designed to offer a cost-effective space-saving solution to interface a variety of process and sensor signals to your control systems. Each model supports several input ranges and can output a proportional 0/4-20mA, 0-10V, or  $\pm 10V$  DC signals.

### DT230/330 Advantages

- USB-programmable (allows easy selection of options that is not possible with pots or jumpers)
- Dual unit saves space and reduces costs
- Signal splitter capability
- Selectable filtering levels
- Configurable output clamp levels (NAMUR)
- Removable, front-facing terminal blocks (simplify your wiring tasks)
- Rail power bus and redundancy
- Supports sink/source wiring
- -40 to 70°C operation
- CE compliant. UL/cUL Class I Division 2 and IECEx ATEX Zone 2 approvals pending.

### 2-Wire and 4-Wire Software-configurable Models Available

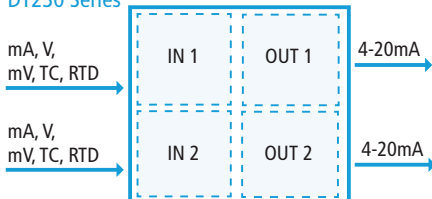
#### DT230 Series 7-32V DC Loop/Local Power

<a href="#">DT233</a>	Universal thermocouple or $\pm 100mV$ input, 4-20mA outputs (sink/source)
<a href="#">DT235</a>	RTD (Pt, Ni, Cu), 0-4500 ohm input, 4-20mA outputs (sink/source)
<a href="#">DT236</a>	DC current and low voltage input, 4-20mA outputs (sink/source)
<a href="#">DT237</a>	Multi-range $\pm 1V$ , $\pm 5V$ , or $\pm 10V$ input, 4-20mA outputs (sink/source)
<a href="#">DT238</a>	Multi-range $\pm 15V$ , $\pm 75V$ , or $\pm 150V$ input, 4-20mA outputs (sink/source)

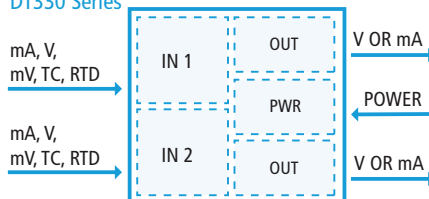
#### DT330 Series 6-32V DC External Power

<a href="#">DT333</a>	Universal thermocouple or $\pm 100mV$ input, 0-20mA, $\pm 10V$ or 0-10V outputs
<a href="#">DT335</a>	RTD (Pt, Ni, Cu), 0-4500 ohm input, 0-20mA, $\pm 10V$ or 0-10V outputs
<a href="#">DT336</a>	DC current and low voltage input, 0-20mA, $\pm 10V$ or 0-10V outputs
<a href="#">DT337</a>	Multi-range $\pm 1V$ , $\pm 5V$ , or $\pm 10V$ input, 0-20mA, $\pm 10V$ or 0-10V outputs
<a href="#">DT338</a>	Multi-range $\pm 15$ , $\pm 75$ , or $\pm 150V$ input, 0-20mA, $\pm 10V$ or 0-10V outputs

DT230 Series

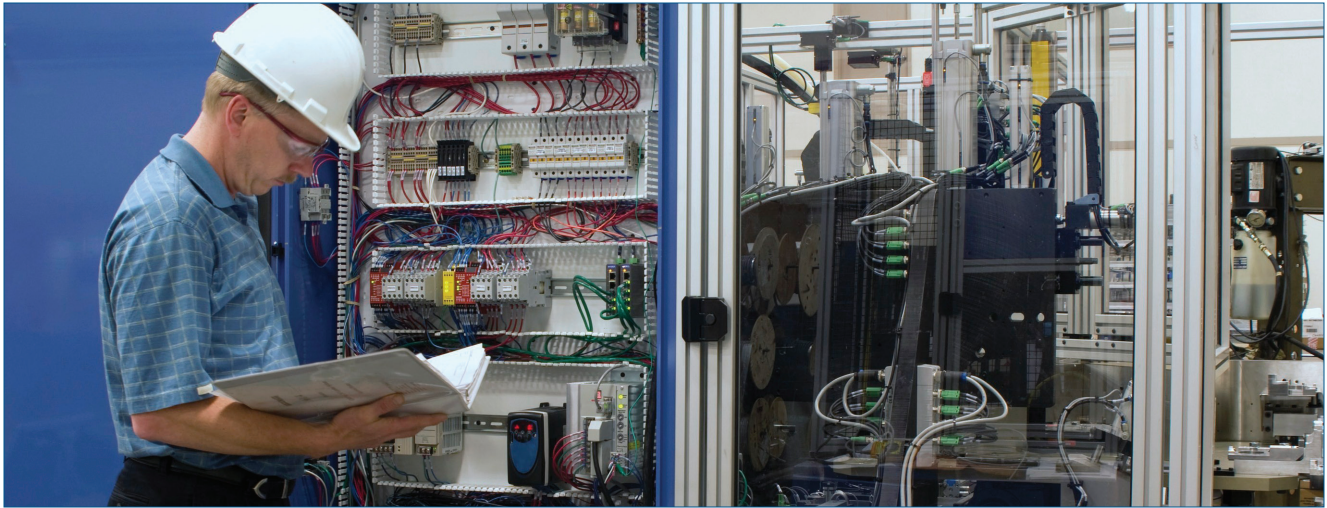


DT330 Series





# Signal Splitters: SP230/330 Series



## New SP230/330 Series Signal Splitters

### New Product Announcement

Acromag's new SP230/330 series of isolated signal splitters/duplicators are designed for easier installation and setup. Eight models, covering a broad range of sensor signals, provide dual 4-20mA outputs proportional to a single current, voltage or temperature input. A USB connection to a Windows® PC or Android® device enables simple, precise configuration of I/O ranges and a variety of operational settings with free software.

### SP220/230 Splitter Advantages

- Easy configuration via USB with Windows® software or Agility™ app for Android®.
- Input scales independently at each output.
- User-selectable filtering (none, low, med, high).
- User-configurable output range clamp levels support NAMUR-compliant operation.
- High accuracy, linearity, stability, and reliability.
- Shock (25g) and vibration (4g) resistant.
- CE compliant. UL/cUL Class I Division 2 and IECEx ATEX Zone 2 approvals.

### 2-Wire and 4-Wire Software-configurable Models Available

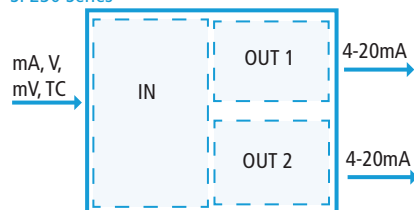
#### SP230 Series 7-32V DC Loop/Local Power

<a href="#">SP233</a>	Universal thermocouple or $\pm 100\text{mV}$ input, 4-20mA outputs (sink/source)
<a href="#">SP236</a>	DC current and low voltage input, 4-20mA outputs (sink/source)
<a href="#">SP237</a>	Multi-range $\pm 1\text{V}$ , $\pm 5\text{V}$ , or $\pm 10\text{V}$ input, 4-20mA outputs (sink/source)
<a href="#">SP238</a>	Multi-range $\pm 15\text{V}$ , $\pm 75\text{V}$ , or $\pm 150\text{V}$ input, 4-20mA outputs (sink/source)

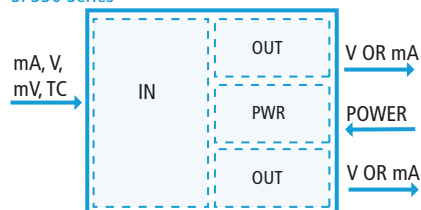
#### SP330 Series 6-32V DC External Power

<a href="#">SP333</a>	Universal thermocouple or $\pm 100\text{mV}$ input, 0-20mA, $\pm 10\text{V}$ or 0-10V outputs
<a href="#">SP336</a>	DC current and low voltage input, 0-20mA, $\pm 10\text{V}$ or 0-10V outputs
<a href="#">SP337</a>	Multi-range $\pm 1\text{V}$ , $\pm 5\text{V}$ , or $\pm 10\text{V}$ input, 0-20mA, $\pm 10\text{V}$ or 0-10V outputs
<a href="#">SP338</a>	Multi-range $\pm 15$ , $\pm 75$ , or $\pm 150\text{V}$ input, 0-20mA, $\pm 10\text{V}$ or 0-10V outputs

SP230 Series



SP330 Series



# Innovative Signal Conditioning



## MicroBlox® Series featuring Bluetooth® Wireless Technology

### New Product Announcement

Acromag's microBlox® uB Series I/O modules offer a compact, high-performance solution for interfacing sensors and field devices with data acquisition systems. uB signal conditioning modules are ideal to isolate, filter, convert and amplify a wide variety of signal types for test, measurement, and control systems. Just plug uB modules into 4, 8, or 16-channel backpanels in any mix for a high-density analog I/O interface. Channel-to-channel isolation provides optimal noise and surge protection from ground loops, spikes, and high common mode voltages.

### microBlox I/O Modules Advantages

- Selection of 175 I/O modules with Bluetooth® wireless technology capability, fixed-range, and cost-saving commercial grade versions.
- User-configurable I/O ranges with smartphone or tablet.
- Input polling with trend charts in Android® or iOS® app.
- Alarm output function with setpoint and deadband.
- 1500V AC isolation field-to-host and channel-to-channel.
- Up to 0.05% accuracy and 130db CMR.
- Shock and vibration-resistant without screws.

### User-configurable & Fixed I/O Range Models Available

#### Input Modules

<a href="#">uB30/uB40</a>	±10mV to ±100mV input, 0-5V or ±5V output
<a href="#">uB31/uB41</a>	±1V to ±60V input, 0-5V or ±5V output
<a href="#">uB32</a>	0-20mA or 4-20mA DC input, 0-5V or ±5V output
<a href="#">uB34/uB35</a>	RTD input, 0-5V or ±5V output
<a href="#">uB37/47</a>	Thermocouple input, 0-5V or ±5V output
<a href="#">uB42</a>	2-wire transmitter (0-20mA) input, 0-5V or ±5V output
<a href="#">uB45</a>	0-50KHz input, 0-5V or ±5V output

#### Output Modules

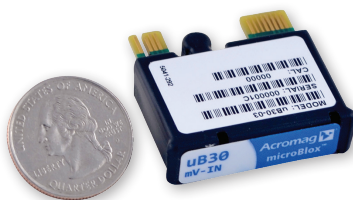
<a href="#">uB39</a>	0-20mA or 4-20mA DC field output, ±5V host input
<a href="#">uB49</a>	0-10V or ±10V field output, ±10V host input

#### Backpanels

<a href="#">uB04/uB04D</a>	4 channel uB backpanel, surface or DIN-rail mount
<a href="#">uB08/uB08D</a>	8 channel uB backpanel, panel or DIN-rail mount
<a href="#">uB16/uB16D</a>	16 channel uB backpanel, panel or DIN-rail mount

#### Power Options

<a href="#">uBDC1</a>	5V DC power module, 10-32V DC supply input
-----------------------	--------------------------------------------







## MicroBlox® Series Splitter and Combination Transmitter/Alarms

### New microBlox® Transmitting Alarms

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 space saving solution for isolating, monitoring, and converting sensor signals to interface with your data acquisition or control system. By inserting a uB input module into a single or dual channel 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.

### microBlox® Transmitting Alarms Advantages

- Single/dual alarms with two independent mechanical or solid-state relays, up to 5A switching.
- Transmitter output with 4-20mA and 0-5V signal ranges.
- Interchangeable input modules for measuring a wide variety of signal types.
- Easy configuration using Bluetooth® wireless technology.
- Rugged design for use in harsh environments.

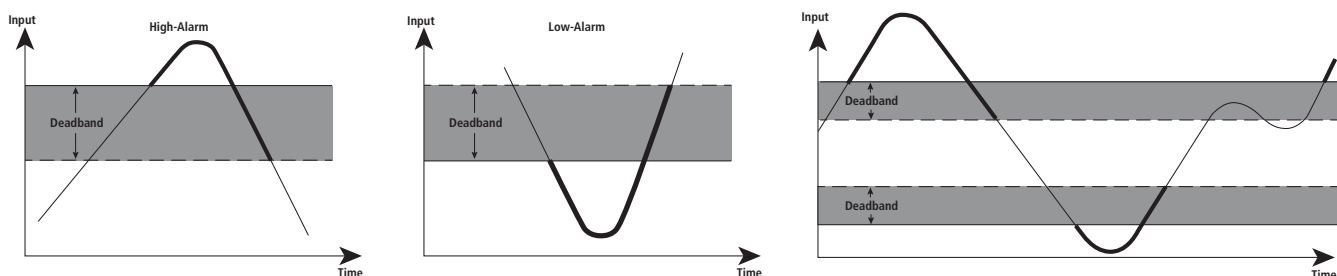
### microBlox® Transmitting Alarms Selection Guide

#### Carriers

<a href="#">uBTA-H-1MR</a> <a href="#">uBTA-H-1SR</a>	Single transmitter/alarm in housing; mechanical or solid-state relays.
<a href="#">uBTX-H-1</a>	Single transmitter in housing.
<a href="#">uBTA-P-1MR</a> <a href="#">uBTA-P-1SR</a>	Single transmitter/alarm, panel mount; mechanical or solid-state relays.
<a href="#">uBTA-P-2MR</a> <a href="#">uBTA-P-2SR</a>	Dual transmitter/alarm, panel mount; mechanical or solid-state relays.
<a href="#">uBSP-P-1</a>	Dual tandem analog current and voltage outputs signal splitter

#### Modules: Plug-In Analog Field Input Modules

<a href="#">uB30-B</a> <a href="#">uB40-B</a>	DC millivolt input, 5Hz bandwidth (uB30-B) or 1kHz bandwidth (uB40-B); Configurable $\pm 100\text{mV}$ .
<a href="#">uB31-B</a> <a href="#">uB41-B</a>	DC voltage input, 4Hz bandwidth (uB31-B) or 1kHz bandwidth (uB41-B); Configurable $\pm 1 - \pm 60\text{V}$ .
<a href="#">uB32-B</a> <a href="#">uB42-B</a>	DC current input (uB32-B); optional 2-wire loop excitation (uB42-B) ; Configurable 0-20mA.
<a href="#">uB34-B</a> <a href="#">uB35-B</a>	Pt RTD input; 2 or 3-wire (uB34-B) or 4-wire (uB35-B); Configurable 0-600°C.
<a href="#">uB37-B</a> <a href="#">uB47-B</a>	Thermocouple input, non-linearized (uB37-B) or linearized (uB47B); Configurable Type J,K,T,R,S.



# Signal Conditioning: microBlox® Series

## Key Features & Benefits



### Alarm Function

Wireless (-B) models support alarm setpoint/deadband control to drive 0 or 5V output.

### Wireless Configuration

Easily set I/O scaling and alarms or poll inputs using Bluetooth® wireless technology with a smartphone or tablet using Acromag's Android™ or iOS® app.



### Flexible Power

5V power modules enables use of 10-32V supplies.

### Mix-and-Match Modules

175 modules support a wide variety of input and output signal types.

### Easy, Secure Mounting

Clip holds module tightly without screws for fast insertion/removal.

### Analog Bus Port

DB25 cable simplifies connection to DAQ systems.

### Rugged, Over-molded Circuit

Superior shock, vibration, moisture, and dust protection.

### High-Density Analog I/O

Up to 16 channels in a compact footprint.

### High-performance

High-accuracy / high noise immunity.



### User-Programmable I/O Ranges

Models with Bluetooth® wireless technology allow custom input and output ranges.



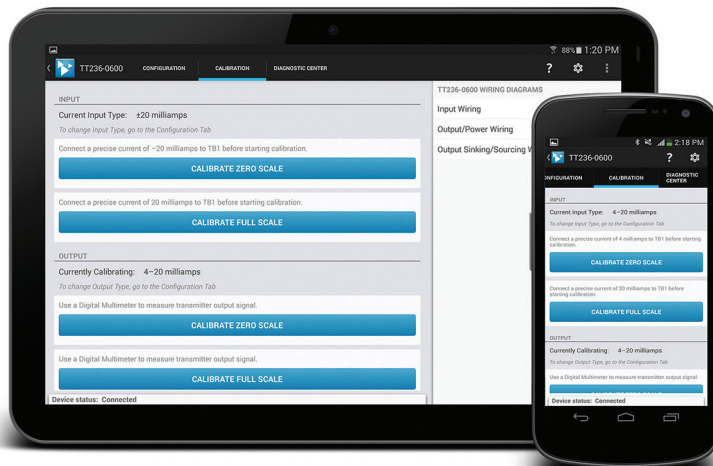


# Signal Conditioners: Agility™ APP

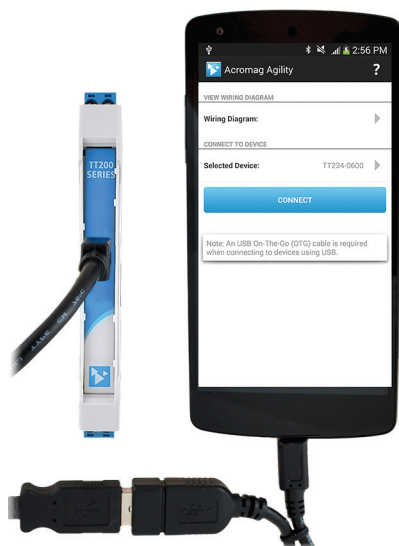
## Acromag Agility™ Config Tool Mobile Application

The Agility™ Config tool is a mobile application that allows easy setup and configuration of Acromag SP Series splitters, DT Series and TT Series transmitters and microBlox® Series I/O modules using a mobile phone or tablet.

To run the application in demo mode, without a connection to a device, simply tap the icon with the triangles in the upper left eight times.



### DT / SP / TT Series



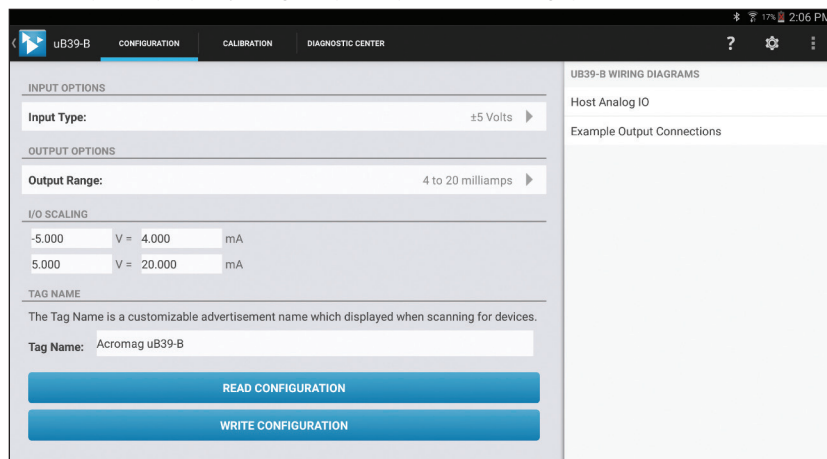
### microBlox® Series



### Key Features & Benefits

- Connects to microBlox® uB Series I/O modules via Bluetooth wireless technology to an Android or iOS device.
- Connects DT & TT Series transmitters and SP Series splitters to Android™ devices via USB on-the-go cable.
- View wiring diagrams, even without an internet connection.
- Perform quick and easy field diagnostics and troubleshooting.
- Ideal for field technicians.
- View, log, and share field data.

With a couple of taps, quickly configure input, output, unit and scaling options.







Quick and easy access to the wiring diagram, even offline without internet access.



**Acromag**   
THE LEADER IN INDUSTRIAL I/O



# Product Series Selection Guide

Network and Data Acquisition	Inputs	Outputs	Network Protocol
<b>Ethernet I/O Modules</b>			
<a href="#">BusWorks® XT Series</a>	Up to 16 channels/module; analog (current, voltage), discrete	Analog (current, voltage), discrete	Modbus TCP/IP, Ethernet/IP, Profinet, i2o peer-to-peer
<a href="#">BusWorks® 900EN Series</a>	Up to 16 channels/module; analog (TC, RTD, current, voltage), microBlox® uB cable interface, discrete	Analog (current, voltage), discrete	Modbus TCP/IP, Ethernet/IP, i2o peer-to-peer
<a href="#">Etherstax® ES2000 Series</a>	Up to 96 channels/module; analog (current, voltage), discrete	Analog (current, voltage), discrete	Modbus TCP/IP, UDP/IP, i2o peer-to-peer
<b>RS-485 I/O Modules</b>			
<a href="#">BusWorks® 900MB Series</a>	Up to 12 channels/module; analog (TC, RTD, current, voltage), discrete	Analog (current, voltage), discrete	Modbus-RTU
<a href="#">BusWorks® 900PB Series</a>	Up to 12 channels/module; analog (TC, RTD, current, voltage), discrete	Analog (current, voltage), discrete	Profibus-DP
<b>Data Acquisition Modules</b>			
 <a href="#">microBlox® uB Series</a>	Millivolt, voltage, current, RTD, thermocouple, frequency & high-speed/wideband	Voltage, 0-20mA or 4-20mA DC	Bluetooth wireless technology enabled - Agility™ Mobile App
Signal Conditioners	Inputs	Outputs	Power
<b>Signal Isolators</b>			
<a href="#">TT230 Series (TT236)</a>	Single-channel; 4-20mA	4-20mA universal sink/source	2/3-wire; 12-32V DC (output loop power)
<a href="#">TT330 Series (TT336)</a>	Single-channel; 4-20mA	4-20mA source	4-wire; 12-32V DC
<a href="#">630T Series (631T, 632T)</a>	Single/dual-channel; 4-20mA	4-20mA source	4-wire; 15-36V, 125V DC; 90-250V AC
<a href="#">650T Series (651T, 652T)</a>	Single/dual-channel; 4-20mA	4-20mA sink	2-wire; 12-36V DC (output loop power)
<a href="#">670T Series</a>	Single/dual/quad-channel; 4-20mA	4-20mA source	2-wire; input loop power
<b>Signal Splitters</b>			
 <a href="#">SP230 Series</a>	Thermocouple; millivolt; current; voltage	Dual output; 4-20mA sink/source	2-wire; 7-32V DC (output loop/local power)
 <a href="#">SP330 Series</a>	Thermocouple; millivolt; current; voltage	Dual output; 0-20mA, ±10V or 0-10V	4-wire; 6-32V DC (external power)
 <a href="#">uBSP Series</a>	Millivolt, voltage, current, RTD, thermocouple	Dual output, 4-20mA, voltage	6-32V DC (external power)
<a href="#">630T Series (633T)</a>	Single input; 4-20mA	Dual output; 4-20mA source	4-wire; 15-36V, 125V DC; 90-250V AC
<a href="#">650T Series (653T)</a>	Single input; 4-20mA	Dual output; 4-20mA sink	2-wire; 12-36V DC (output loop power)



# Product Series Selection Guide

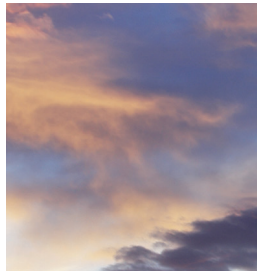
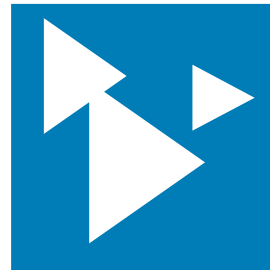


	Signal Conditioners	Inputs	Outputs	Power
	<b>Signal Transmitters and Converters</b>			
NEW!	<a href="#">DT230 Series</a>	Dual-channel; current, voltage, thermocouple, RTD, resistance	4-20mA universal sink/source	2-Wire, 7-32V DC loop power
NEW!	<a href="#">DT330 Series</a>	Dual-channel; current, voltage, thermocouple, RTD, resistance	Scalable $\pm 10V$ , 0-10V, $\pm 20mA$ , 0-20mA source	4-Wire, 6-32V DC external power
	<a href="#">ST130 Series</a>	Single-channel; thermocouple, RTD, resistance, millivolt	4-20mA sink	2-wire; 9-32V DC (output loop power)
	<a href="#">TT230 Series</a>	Single-channel; current, voltage, thermocouple, RTD, thermistor, resistance, potentiometer, frequency	4-20mA universal sink/source	2/3-wire; 12-32V DC (output loop power)
	<a href="#">TT330 Series</a>	Single-channel; current, voltage, thermocouple, RTD, thermistor, resistance, potentiometer, frequency	Scalable $\pm 10V$ , 0-10V, $\pm 20mA$ , 0-20mA source	4-wire; 12-32V DC
NEW!	<a href="#">uBTX microBlox® Series</a>	Single-channel; current, voltage, thermocouple, RTD, frequency	0/4-20mA, 0/1-5V	6-32V DC SELV
	<a href="#">610T Series</a>	Single/dual-channel; current, voltage	Scalable 0-10V, 0-20mA source	4-wire; 10-36V DC
	<a href="#">650T Series (654T)</a>	Dual-channel; current, voltage	4-20mA sink	2-wire; 12-50V DC (output loop power)
	<a href="#">650T Series (655T, 656T)</a>	Single/dual-channel; thermocouple, millivolt	4-20mA sink	2-wire; 12-50V DC (output loop power)
	<a href="#">650T Series (657T, 658T)</a>	Single/dual-channel; RTD, resistance	4-20mA sink	2-wire; 12-50V DC (output loop power)
	<a href="#">800T IntelliPack® Series</a>	Single/dual-channel; current, RTD, thermocouple, resistance, voltage, frequency/pulse, strain gage (bridge), load cell	Scalable 0-10V, 0-20mA source, alarm relay	4-wire; 10-36V DC
	<b>Limit Alarms</b>			
NEW!	<a href="#">uBTA microBlox® Series</a>	Millivolt, voltage, current, RTD, thermocouple	Single/dual SPST/SPDT 1A/5A relays, 0/4-20mA, 0/1-5V	6-32V DC SELV
	<a href="#">800A IntelliPack® Series</a>	Single/dual-channel; current, voltage, thermocouple, RTD, resistance	Single DPDT or dual SPDT 5A relays	4-wire; 10-36V DC
	<a href="#">260A / 361A / 461A Flat Pack Series</a>	Single-channel; current, voltage	Single/dual SPDT 2A or 5A alarm relays	2/3/4-wire; input loop-powered (4-20mA); 10-36V DC; 115/230V AC
	<b>Computation</b>			
	<a href="#">IntelliPack® (892M, 894M)</a>	Dual/quad input; current, voltage	Single output; 0-20mA source, 0-10V	4-wire; 10-36V DC
	<a href="#">IntelliPack® (895M, 896M)</a>	Single/dual-channel; current, voltage	Frequency, pulse, pwm, alarm relay	4-wire; 10-36V DC

# 60 YEARS OF DESIGN MANUFACTURING EXPERIENCE



Visit us on the web!  
**Acromag.com**



- Product data sheets, manuals, and price information
- Order online with your credit card or purchase order
- Technical support, tutorials, and application notes
- Subscribe to our monthly e-newsletter

## Other quality Acromag services and products

### Embedded Processors

- FPGAs
- Embedded computers
- COM Express
- AcroExpress® SBCs

### Embedded I/O

- AcroPack® I/O mezzanine modules
- IndustryPack I/O modules
- Carrier cards

ISO9001  
AS9100



**Acromag**   
THE LEADER IN INDUSTRIAL I/O

877-214-6267 ■ sales@acromag.com ■ www.acromag.com ■ 3075 S Wixom Rd, Wixom MI 48393 USA

8400674G © Acromag, Inc. 2019. Data subject to change without notice. Printed in USA 3/2019

The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by Acromag is under license. Android is a trademark of Google LLC. Other trademarks and trade names are those of their respective owners.