

# BAS-3018

# BAS-3024

## 8-ch UI Expansion Module

## 4-ch UI, 4-ch AO, 4-ch DO Expansion Module



### Features

- 24 V<sub>DC</sub> or 24 V<sub>AC</sub> input
- Universal input supports 0 ~ 10 V, 0 ~ 20 mA, 4 ~ 20 mA, RTD, Thermistor (3K, 10K), and digital input
- Analog output supports 0 ~ 10 V, 0 ~ 20 mA, and 4 ~ 20 mA (BAS-3024 only)
- Supports PWM output (BAS-3024 only)

### Introduction

BAS-3018/BAS-3024 expansion I/O modules can be stacked on the DDC controller, or can serve as remote standalone I/O modules through an RS-485 network. These expansion I/O modules add both scalability and flexibility to Advantech BAS-3000 solutions. Like the DDC, I/O expansion modules can be programmed using the BASPro programming tool.

### Specifications

#### General

- **Dimension (W x H x D)** 120 x 120 x 44 mm (4.72" x 4.72" x 1.73")
- **Enclosure** ABS + PC
- **Power Input** 24 V<sub>DC</sub>/24 V<sub>AC</sub>
- **Power Consumption** 3 W @ 24 V<sub>DC</sub> (BAS-3018)/4 W @ 24 V<sub>DC</sub> (BAS-3024)
- **Watchdog Timer** Yes
- **Communication** Local Bus (Connect to BAS-3520/3512/3520C)  
RS-485 (Standalone as Remote IO Device)

#### Universal Input

- **Channels** 8 (BAS-3018)/4 (BAS-3024)
- **Resolution** 16-bit
- **Sample Rate** 10 Hz (Total)
- **Accuracy** ±0.1% of FSR (Voltage, Current)
- **Type and Range** Analog Input: 0 ~ 10 V, 0 ~ 20 mA, 4 ~ 20 mA, Pt-100/1000, RTD, Thermistor (3 k, 10 k)  
Digital Input Logic High: Close (Dry Contact) Logic Low: Open
- **Over Voltage Protection** ±35 V

#### Analog Output (BAS-3024 only)

- **Channels** 4
- **Resolution** 12-bit
- **Accuracy** ± 0.1% of FSR
- **Range** 0 ~ 10 V, 0 ~ 20 mA, 4 ~ 20 mA

#### Digital Output (BAS-3024 only)

- **Channels** 4 (Source Type)
- **Vcc** 10 ~ 35 V<sub>DC</sub>, Current: 1 A (per channel)
- **PWM Output (2 channels)**  
Minimum Period 1 second (for PWM output)  
Minimum Pulse Width 0.1 second (for PWM output)

#### Protection

- **Isolation Voltage** 3,000 V<sub>DC</sub>

#### Environment

- **Operating Temperature** -10 ~ 60° C (14 ~ 140° F)
- **Storage Temperature** -20 ~ 80° C (-4 ~ 176° F)
- **Operating Humidity** 20 ~ 95% (Non-condensing)
- **Storage Humidity** 0 ~ 95% (Non-condensing)

### Ordering Information

- **BAS-3018-AE** 8-ch UI Expansion Module
- **BAS-3024-AE** 4-ch UI, 4-ch AO, 4-ch DO Expansion Module