# Analog Modules

## A1S64AD Four Channel Analog Input Module

The A1S64AD analog input module can accept either current or voltage input signals. These signals are then converted into a 16 bit (±) binary value as a sequence control resource. Input signals can be instantly read, or they can be sampled for user programmable time/count average processing. Other features of this module include:

- Offset/gain setting switch
- Select sampling function or average function
- Permit or forbid A/D conversion by channel

### A1S64AD specifications

| | |
|---|---|
| Number of input channels | 4 |
| Analog input | Voltage: DC 0 – ±10V, input resistance 1MΩ<br>Current: DC 0 – ±20mA, input resistance 250Ω |
| Digital output | 16 bit (–12,288 to +12,287 at most) |
| Maximum resolution | Voltage: 0.83mV (1/12000)<br>Current: 3.3µA (1/6000) |
| Overall accuracy | ±1% |
| Maximum conversion time | 20ms |
| Absolute maximum analog input | Voltage: DC ±15V<br>Current: DC ±30mA |
| Insulation method | Photocoupler insulation between input terminals and internal circuity<br>No insulation between channels |
| Number of I/O points required | 32 |
| Current consumption (5VDC) | 0.4A |

## A1S68AD Eight Channel Analog Input Module

The A1S68AD analog input module, which can also accept either current or voltage input signals, has a total of 8 input channels. Each channel can be set individually by means of dip switches located inside the cover to accommodate various input types and ranges. Other features of this module include:

- Read data from 8 channels at once with the FROM command
- Select sampling function or average function
- Permit or forbid A/D conversion by channel

### A1S68AD specifications

| Analog input | Voltage: –10 to 0 to 10 V (1MΩ input resistance); Current: 0 to 20mA (250Ω input resistance) | | |
|---|---|---|---|
| Conversion characteristic | Voltage input | Current input | Digital output value |
| | 0 to 10V | — | 0 to 4000 |
| | –10 to 10V | — | –2000 to 2000 |
| | 0 to 5V | 0 to 20mA | 0 to 4000 |
| | 1 to 5V | 4 to 20mA | 0 to 4000 |
| Absolute maximum input | Voltage: ± 35V; Current: 30mA | | |
| Conversion speed | 0.5ms/ch | | |
| Overall accuracy | ±1% | | |
| Insulation method | Photocoupler insulation between input terminals and internal circuitry<br>No insulation between channels | | |
| No. of I/O points required | 32 | | |
| Consumption current (5VDC) | 0.4A | | |