

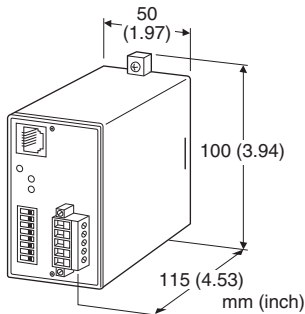
Field Network Modules 61-UNIT Series

ANALOG I/O MODULE

(conforms to AnyWire wiring saving system)

Functions & Features

- Interfacing analog I/O signals from/to Mini-M or Pico-M modules with AnyWire wiring saving systems
- Saving power and I/O wiring inside an instrumentation panel



MODEL: 61A-[1][2]-[3][4]

ORDERING INFORMATION

- **Code number:** 61A-[1][2]-[3][4]
Specify a code from below for each [1] through [4].
(e.g. 61A-161-K/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[1] NO. OF CHANNELS

- 04: 4 points
- 08: 8 points
- 16: 16 points

[2] I/O TYPE

- 1: Input
- 2: Output

[3] POWER INPUT

AC Power

K: 85 - 132 V AC
(Operational voltage range 85 - 132 V, 47 - 66 Hz)

DC Power

R: 24 V DC
(Operational voltage range 24 V \pm 10 %, ripple 10 %p-p max.)
(Specify power suffix code R (24 V DC) when the UNIT is to be combined with the M8BS2.)

[4] OPTIONS

- blank: none
- /Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to M-System's web site.)

- /C01: Silicone coating
- /C02: Polyurethane coating
- /C03: Rubber coating

RELATED PRODUCTS

- Installation Base (model: M2BS2)
- Installation Base (model: M8BS2)

GENERAL SPECIFICATIONS

Construction: Plug-in

Connection

AnyWire: Euro type connector terminal (applicable wire size: 0.2 to 2.5 mm², stripped length 7 mm)

I/O: Via Installation Base (model: MxBS2)

Power input: Via Installation Base (model: MxBS2)

Housing material: Flame-resistant resin (black)

Isolation: I/O to AnyWire to power

Power indicator: Green LED turns on with power supplied.

AnyWire SPECIFICATIONS

Network: Conforms to AnyWire wiring saving system

Transmission media

- General-purpose 2-core / 4-core cable (0.75 - 1.25 mm²)
- General-purpose wiring (0.75 - 1.25 mm²) etc.

Station No.: DIP switch; 00 - 3F

Transmission clock / maximum transmission distance

(configurable with DIP switch(es))

- 7.8 kHz / 800 m (874.9 yds)
- 15.6 kHz / 500 m (546.8 yds)
- 31.3 kHz / 200 m (218.7 yds)
- 62.5 kHz / 100 m (109.4 yds)

RDY indicator: Red LED ON at normal operating

LINK indicator: Red LED blinking at normal operating

INPUT SPECIFICATIONS

■ Analog Input

Input range: 1 - 5 V DC

Input resistance: \geq 1 M Ω

(Each input must be isolated by signal conditioners. Non-isolated modules such as M2BW and M8BW are not usable.)

A/D conversion

Moving averaging: 4 samples

Sampling rate: 160 ms

A/D conversion output: Signed binary

Signal range 0 - 100 % is converted into hexadecimal 0000 - 2710 (0 - 10000). -15 to 0 % is a negative range represented by 2's complements.
Overall range is represented by hexadecimal FA24 - 2CEC (-1500 - +11500), for -15 - +115 %.

OUTPUT SPECIFICATIONS

■ Analog Output

Output range: 1 - 5 V DC

Load resistance: 20 kΩ minimum

(Output must be isolated with signal conditioners.

When the transmission line is open, the last value sampled before failure is held. Non-isolated modules such as M2BW and M8BW are not usable.)

D/A conversion input: Signed binary

Signal range 0 - 100 % is converted into hexadecimal 0000 - 2710 (0 - 10000).

-15 to 0 % is a negative range represented by 2's complements.

Overall range is represented by hexadecimal FA24 - 2CEC (-1500 - +11500), for -15 - +115 %.

INSTALLATION

Power consumption

- AC: Approx. 4 VA
- DC: Approx. 4 W (160 mA)

Operating temperature: -5 to +55°C (23 to 131°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Atmosphere: No corrosive gas or heavy dust

Mounting: Installation Base (model: MxBS2)

Weight: 250 g (0.55 lb)

PERFORMANCE in percentage of span

A/D conversion: ±0.1 %

D/A conversion: ±0.1 %

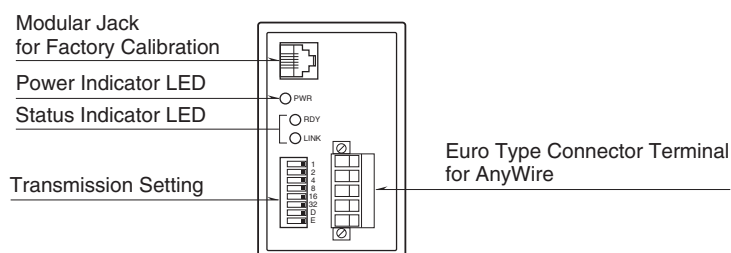
Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)

Permissible power failure duration: ≤ 10 msec.

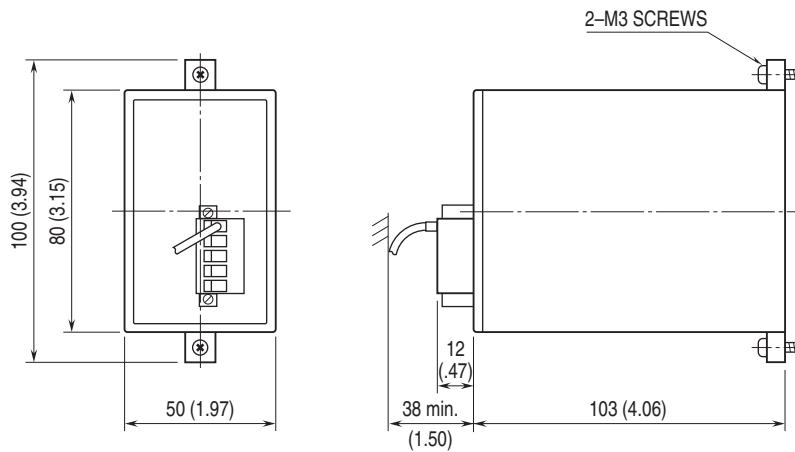
Insulation resistance: ≥ 100 MΩ with 500 V DC

Dielectric strength: 1500 V AC @ 1 minute (I/O to AnyWire to power)

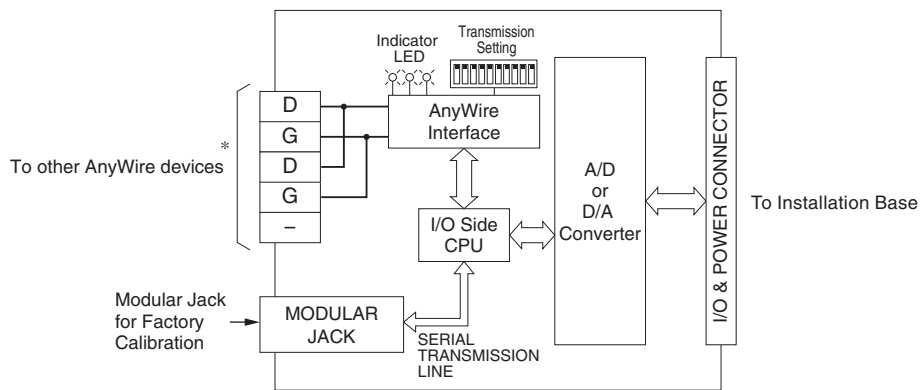
EXTERNAL VIEW



EXTERNAL DIMENSIONS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



* Refer to the manual of the AnyWire device to be connected for explanations how to connect the device.



Specifications are subject to change without notice.