

# Product data sheet

Specifications



analog isolated high level input module, Modicon X80, 8 HART inputs, 4 to 20mA

BMEAHI0812

## Main

Range of product	Modicon X80
Product or component type	Analog input module

## Complementary

Application specific I/O	HART
Product compatibility	BMEP58... processor BMXFTB20... terminal block ABE7CPA31 BMEXBP... backplane ABE7CPA02 ABE7CPA03 Head module BMECRA31210
Electrical connection	20 ways terminal block Telefast
Isolation between channels	Isolated
Analogue input number	8
Analogue input type	Current 4...20 mA
Analogue input resolution	15 bits + sign
Input impedance	250 Ohm internally protective resistor (3.6 to 50 Ohm)
Measurement error	0.15 % of full scale 25 °C <= 0.3 % of full scale 0...60 °C
Temperature drift	50 ppm/°C
Isolation voltage	1000 V DC for 60 s between channels 1400 V DC for 60 s between channels and ground 1400 V DC for 60 s between channels and bus
Checks	Broken wire detection
Topology	Point-to-point
Function available	I/O mapping
Net weight	0.233 kg

## Environment

Ambient air temperature for operation	0...60 °C
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility

<b>Product certifications</b>	CE RCM CSA EAC Merchant Navy UL
<b>Standards</b>	EN/IEC 61010-2-201 EN/IEC 61131-2 UL 61010-2-201 CSA C22.2 No 61010-2-201
<b>IP degree of protection</b>	IP20

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	5.700 cm
<b>Package 1 Width</b>	11.200 cm
<b>Package 1 Length</b>	12.000 cm
<b>Package 1 Weight</b>	229.000 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	15
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	3.770 kg



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Environmental footprint

Total lifecycle Carbon footprint	138
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Environmental Disclosure	<a href="#">Product Environmental Profile</a>
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## Use Better

### Materials and Substances

Packaging made with recycled cardboard	Yes
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Packaging without single use plastic	Yes
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<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
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REACH Regulation	<a href="#">REACH Declaration</a>
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California proposition 65	<b>WARNING:</b> This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
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## Use Again

### Repack and remanufacture

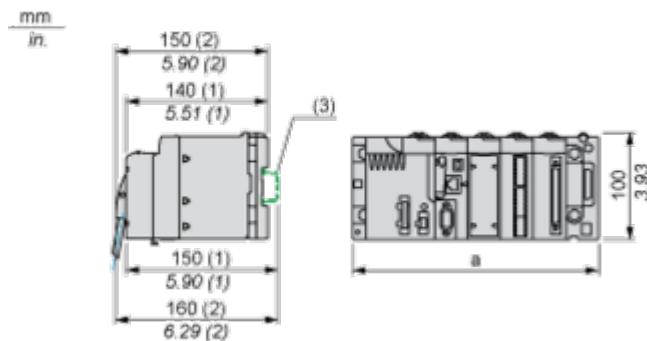
End of life manual availability	<a href="#">End of Life Information</a>
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Take-back	No
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## Dimensions Drawings

Modules Mounted on Racks

## Dimensions



(1) with removable terminal block (cage, screw or spring)

(2) with FCN connector

(3) on AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMEXBP0400/0400H/0800/0800H/1200/1200H rack.

	a (in mm)	a (in in.)
BMEXBP0400 and BMEXBP0400H	242.4	09.54
BMEXBP0800 and BMEXBP0800H	372.8	14.68
BMEXBP1200 and BMEXBP1200H	503.2	19.81

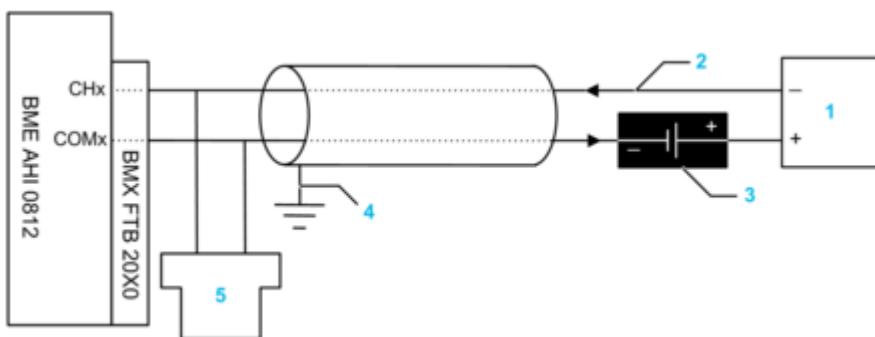
## Connections and Schema

Module Connection

NOT CONNECTED	1	NOT CONNECTED
COMMON 0	2	CHANNEL 0
COMMON 1	3	CHANNEL 1
COMMON 2	4	CHANNEL 2
COMMON 3	5	CHANNEL 3
COMMON 4	6	CHANNEL 4
COMMON 5	7	CHANNEL 5
COMMON 6	8	CHANNEL 6
COMMON 7	9	CHANNEL 7
NOT CONNECTED	10	NOT CONNECTED
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	

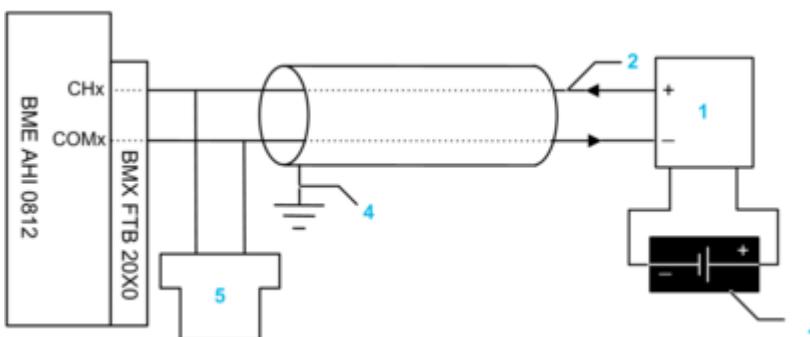
Input Circuit Diagram

## With 2-Wire Transmitter



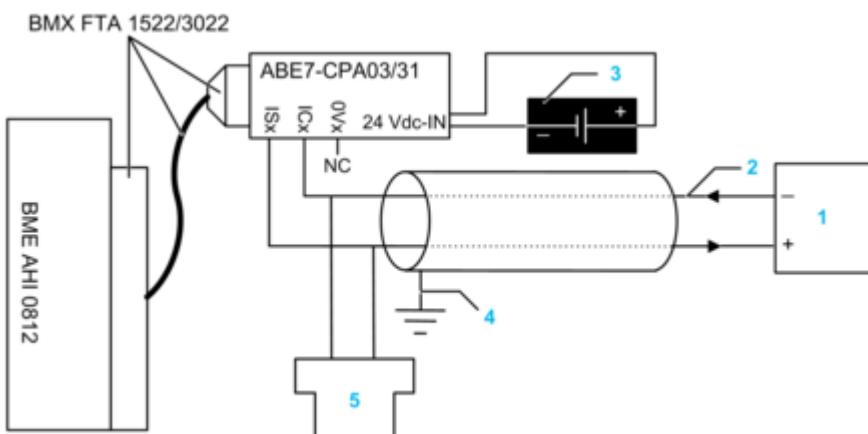
- 1 2-wire transmitter
- 2 4-20 mA current loop, with arrows indicating direction of current flow
- 3 Field power supply
- 4 Protective ground
- 5 Secondary HART master (hand-held)

## With 4-Wire Transmitter



- 1 4-wire transmitter
- 2 4-20 mA current loop, with arrows indicating direction of current flow
- 3 Field power supply
- 4 Protective ground
- 5 Secondary HART master (hand-held)

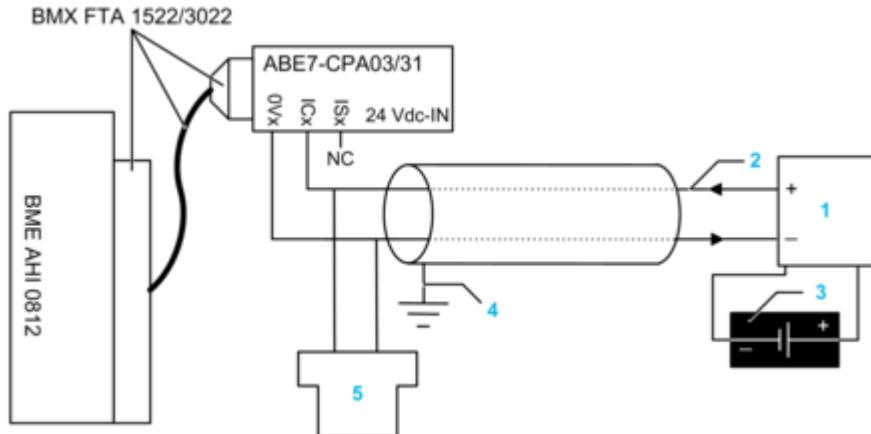
## With 2-Wire Transmitter and TELEFAST Connector with Power Supply



- 1 2-wire transmitter
- 2 4-20 mA current loop, with arrows indicating direction of current flow

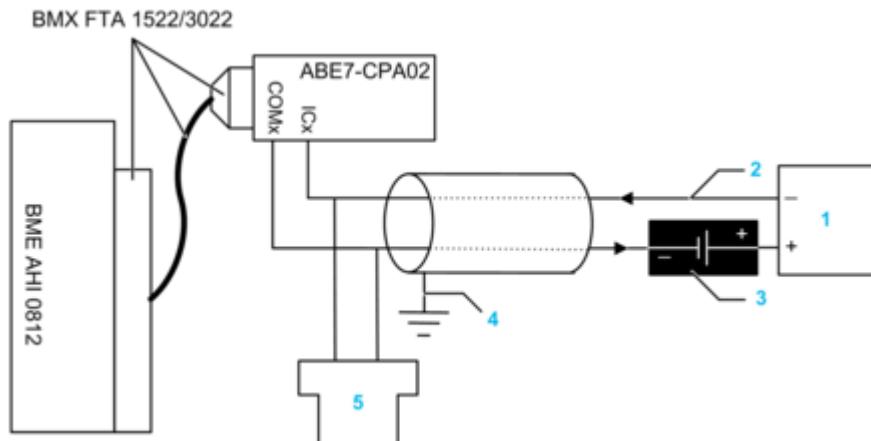
- 3 24 Vdc power supply
- 4 Protective ground
- 5 Secondary HART master (hand-held)

#### With 4-Wire Transmitter and TELEFAST Connector with Power Supply



- 1 4-wire transmitter
- 2 4-20 mA current loop, with arrows indicating direction of current flow
- 3 Field power supply
- 4 Protective ground
- 5 Secondary HART master (hand-held)

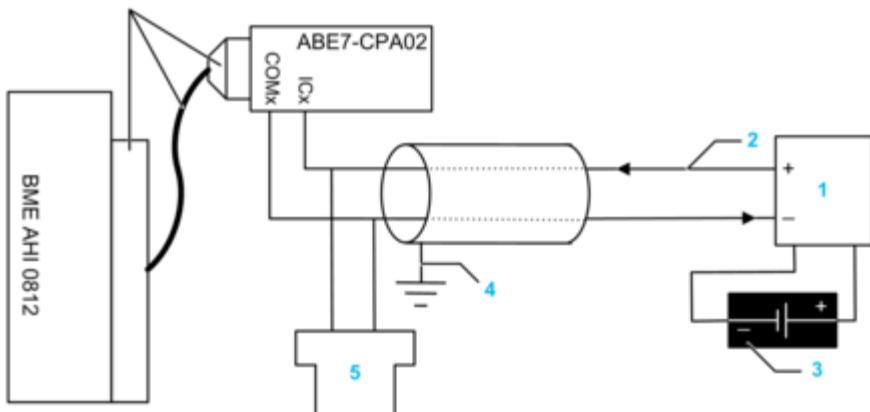
#### With 2-Wire Transmitter and TELEFAST Connector without Power Supply



- 1 2-wire transmitter
- 2 4-20 mA current loop, with arrows indicating direction of current flow
- 3 Field power supply
- 4 Protective ground
- 5 Secondary HART master (hand-held)

#### With 4-Wire Transmitter and TELEFAST Connector without Power Supply

BMX FTA 1522/3022



1 4-wire transmitter

2 4-20 mA current loop, with arrows indicating direction of current flow

3 Field power supply

4 Protective ground

5 Secondary HART master (hand-held)

Image of product / Alternate images

Alternative

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