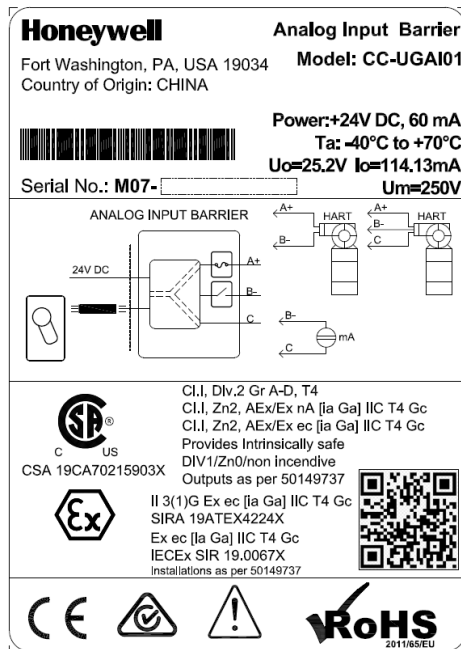


8.4.6 Label



 NOTE	When the QR code is scanned, the following link will be opened. https://www.honeywellprocess.com/library/marketing/tech-specs/Analog-Input-Barrier-CC-UGAI01.pdf
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8.4.7 List of IO modules supported

1	CC-PAIH01	CC-TAIX01, CC-TAIX11	AI- HART	High Level Analog Input with HART
2	CC-PAIH02	CC-TAIX01, CC-TAIX11	AI- HART	High Level Analog Input with HART
3	CC-PAIX02	CC-TAIX01, CC-TAIX11	AI-HL	High Level Analog Input with Differential/Single-ended non-HART
4	CC-PAIX01	CC-TAIX01, CC-TAIX11	AI-hl	High Level Analog Input with Differential non-HART
5	CC-PAIN01	CC-TAIN01, CC-TAIN11	AI-hl	High Level Analog Input with non-HART 1 Modem, High Level Analog Input with HART
6	CC-PUIO31	CC-TUIO31, CC-TUIO41	UIO-2	UIO-2
7	CC-PAIH51	CC-TAIX51,	AIH	High Level Analog Input with HART

		CC-TAIX61		
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8.4.8 Fuse rating

Field side terminals of FTA assembly is provided with options for install M5 x 20mm glass fuse. In the case of Div2/zone2 installations instructions provided in HAZLOC manual to be followed. Exact current rating of the fuse may be decided based on the functional load current for a given IO.

8.4.9 Protection scheme

- Power supply terminals of the modules are provided with reverse polarity protection
- Power rail is provided with inrush current control
- Field side terminals are provided with short circuit protection and reverse polarity protection
- Modules are provided with mistake proofing keys

8.4.10 Conditions of use

Refer to HAZLOC manual (document number 50149737) for conditions of use.

8.5 Universal Analog Input isolator (model CC- UAIA01)

CC-UAIA01 is a single channel galvanically isolated analog input module which supports 4-20mA with HART. This module takes input from a field device and reflect the field side signals to DCS.

8.5.1 Module physical specification

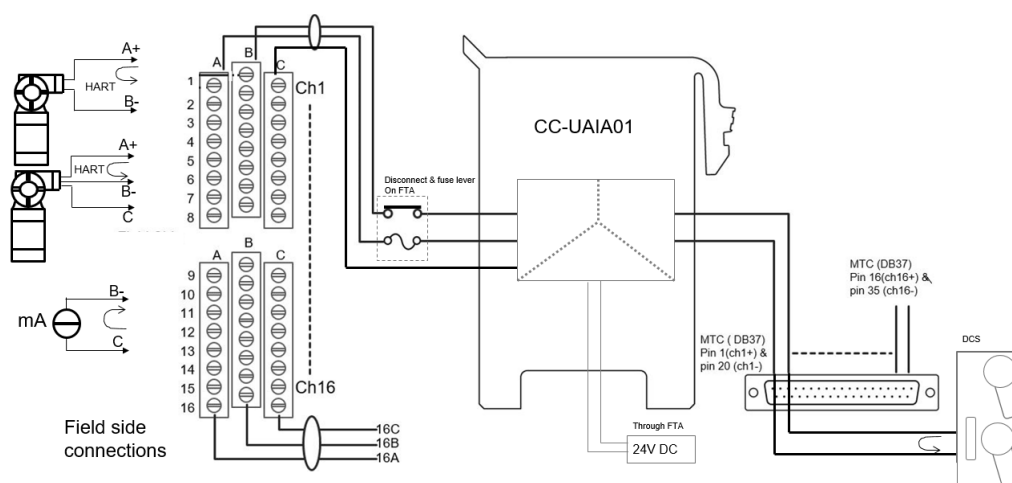
Dimensions	141.5mm (L) x 85.75mm (W) x10mm (H)
Assembly option	Backplane mount, screw less
Mistake proofing	mistake proofing keys provided



8.5.2 Features

- Single channel Isolated Analog Input isolator
- Transparent Open Wire Detection
- 3-way Isolation
- Supports HART communication
- Reverse Polarity Protection
- 2 wires, 3 wire & 4 wires (2 wire sink) supported
- Power LED indication

8.5.3 Connections diagram



			Field side of CC-UGAI01 module		DCS side of CC-UGAI01 module
Wiring mode	4-20mA	HART	Source mode	Sink mode	2 wire Sink mode
2 wires	✓	✓	✓		✓
3 wires	✓		✓		✓
4 wires (2 wire sink)	✓			✓	✓

8.5.4 Specification

Physical Specification	
Dimensions	141.5mm (L) x 85.75mm (W) x10mm (H).
Assembly option	Back-plane mount, screw less
Indicators	Power ON (green LED)
Ambient Conditions	
Ambient temperature (operation)	-40°C to + 70°C
Ambient temperature (storage/transport)	-40°C to + 85°C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Vibration	Non-Operational 1g 10Hz to 150Hz, Operational 0.5g 10Hz to 150Hz
Shock	5g operational, 15g Non-Operational
Enclosure and Mounting	
Assembly	Base plate and housing
Mounting	Base plate with DIN rail mount & snap housing to the base plate
Electrical Specifications	
Power	24V DC
Rated Current	55mA at 24V
Power Consumption	1.32W
Power dissipation	1W at 24V DC with 20mA loop current
Field side wire gauge	12-24 AWG
Compliance	
Ingress protection	IP20 as per IEC 60529
Flammability rating	V0 as per UL 94
Conformance	ANSI/ISA 60079-0; 60079-15
EMC directive	2014/30/EU (IEC 61326-1 2012)

Certification	IEC Ex, ATEX, cCSAus
Compliance	RoHS

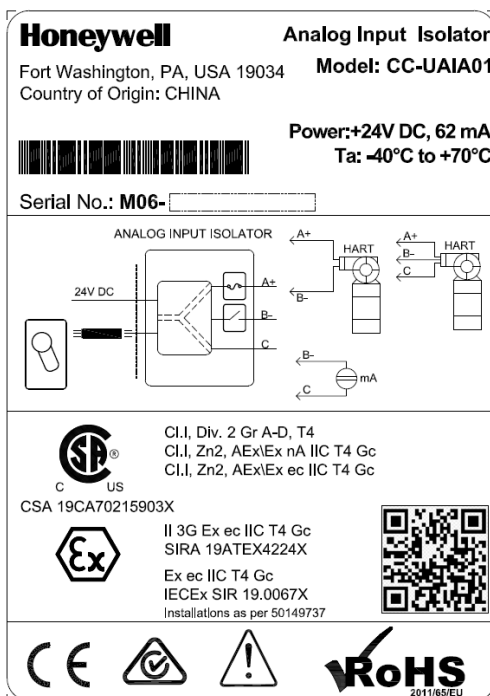
<u>Galvanic Isolation</u>	
Input to output	1500 VAC
<u>HAZLOC side interface</u>	
Input Channels	1 per module
Transfer accuracy at 20°C	+/- 20uA
Influence of ambient temperature	Influence of ambient temperature reference to +20°C a. -30 °C to +70°C : 2uA /°C b. -40 °C to -30°C : 6uA /°C
Short circuit current	23.5mA
Available voltage at max load	>16V at 20mA field side current
Type of devices connected	Transmitters (4 to 20mA), 2 wire, 3 wire and 4 wire types

<u>Safe side interface</u>	
Voltage Input	24V DC
Current Input	4 to 20mA
Current during open wire condition	<150uA
Wiring scheme	2 wire

8.5.5 Associated part numbers

Sl #	Part details	Model number	Part number
1	FTA assembly	CC- UGIA01	51156590-100
3	MTC cable		51156516

8.5.6 Label



 NOTE	When the QR code is scanned, the following link will be opened. https://www.honeywellprocess.com/library/marketing/tech-specs/Analog-Input-Isolator-CC-UAIA01.pdf
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8.5.7 List of IO modules supported

1	CC-PAIH01	CC-TAIX01, CC-TAIX11	AI- HART	High Level Analog Input with HART
2	CC-PAIH02	CC-TAIX01, CC-TAIX11	AI- HART	High Level Analog Input with HART
3	CC-PAIX02	CC-TAIX01, CC-TAIX11	AI-HL	High Level Analog Input with Differential/Single-ended non-HART
4	CC-PAIX01	CC-TAIX01, CC-TAIX11	AI-hl	High Level Analog Input with Differential non-HART
5	CC-PAIN01	CC-TAIN01, CC-TAIN11	AI-hl	High Level Analog Input with non-HART 1 Modem, High Level Analog Input with HART
6	CC-PUIO31	CC-TUIO31, CC-TUIO41	UIO-2	UIO-2
7	CC-PAIH51	CC-TAIX51,	AIH	High Level Analog Input with HART

		CC-TAIX61		
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8.5.8 Fuse rating

Field side terminals of FTA assembly is provided with options for install M5 x 20mm glass fuse. In the case of Div2/zone2 installations instructions provided in HAZLOC manual to be followed. Exact current rating of the fuse may be decided based on the functional load current for a given IO.

8.5.9 Protection scheme

- Power supply terminals of the modules are provided with reverse polarity protection
- Power rail is provided with inrush current control
- Field side terminals are provided with short circuit protection and reverse polarity protection
- Modules are provided with mistake proofing keys

8.5.10 Conditions of use

Refer to HAZLOC manual (document number 50149737) for conditions of use.

8.6 Universal Analog Output barrier (model CC- UGA001)

CC-UGA001 is a single channel galvanically isolated analog output barrier module which supports 4-20mA with HART. This module takes input from DCS and reflect this signal to the field.

8.6.1 Module physical specification

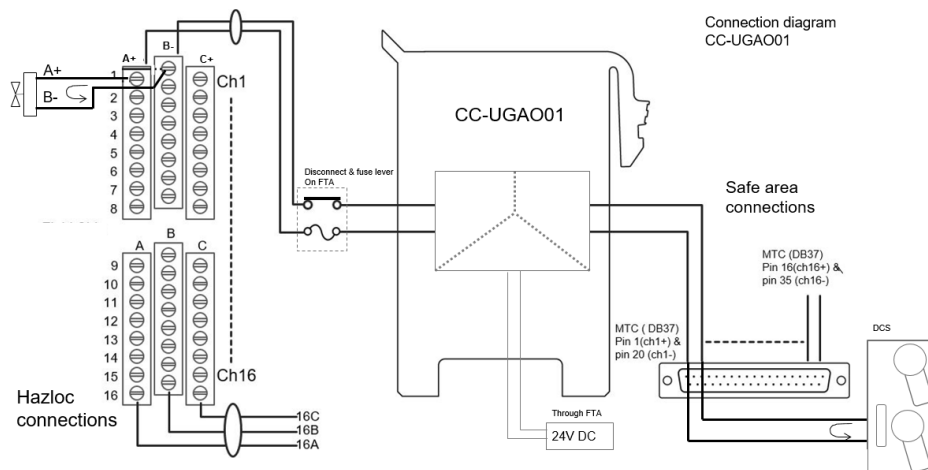
Dimensions	141.5mm (L) x 85.75mm (W) x10mm (H)
Assembly option	Backplane mount, screw less
Mistake proofing	mistake proofing keys provided



8.6.2 Features

- Single channel Isolated Analog Output Barrier.
- Transparent Open Wire Detection
- 3-way Isolation
- Supports HART communication
- Reverse Polarity Protection
- Power LED indication

8.6.3 Connections diagram



			Field side of CC-UGAO01 module		DCS side of CC-UGAO01 module
Wiring mode	4-20mA	HART	Source mode	Sink mode	Source mode
2 wire	✓	✓	✓		✓

8.6.4 Specification

Parameter	Specifications
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Physical Specification	
Dimensions	141.5mm (L) x 85.75mm (W) x10mm (H).
Assembly option	Back-plane mount, screw less
Indicators	Power ON (green LED)
Ambient Conditions	
Ambient temperature (operation)	-40°C to + 70°C
Ambient temperature (storage/transport)	-40°C to + 85°C
Permissible humidity (operation)	5 % - 95 % (non-condensing)
Vibration	Non-Operational 1g 10Hz to 150Hz, Operational 0.5g 10Hz to 150Hz
Shock	5g operational, 15g Non-Operational
Enclosure and Mounting	
Assembly	Base plate and housing
Mounting	Base plate with DIN rail mount & snap housing to the base plate
Electrical Specifications	
Power	24V DC
Rated Current	55mA at 24V
Power Consumption	1.32W
Power dissipation	1.22W at 24V DC with 20mA loop current & 250 ohm load
Field side wire gauge	12-24 AWG
Compliance	
Ingress protection	IP20 as per IEC 60529
Flammability rating	V0 as per UL 94
Conformance	ANSI/ISA 60079-0; 60079-15
EMC directive	2014/30/EU (IEC 61326-1 2012)
Certification	IEC Ex, ATEX, cCSAus

Compliance	RoHS
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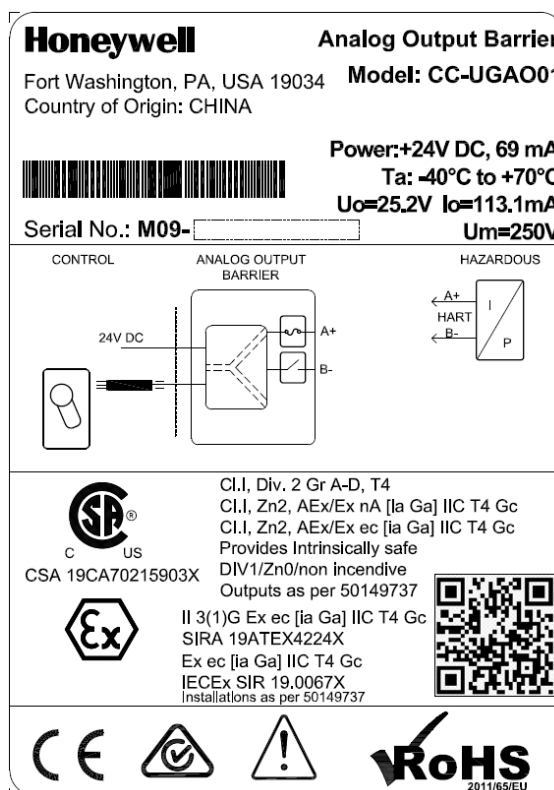
<u>Galvanic Isolation</u>	
Input to output	1500 VAC
<u>HAZLOC side interface</u>	
Input Channels	1 per module
Transfer accuracy at 20°C	+/- 20uA
Influence of ambient temperature	Influence of ambient temperature reference to +20°C -30 °C to +70°C : 2uA /°C -40 °C to -30°C : 6uA /°C
Max load	650 ohms
Type of devices connected	2 wire type

<u>Safe side interface</u>	
Voltage Input	24V DC
Current Input	4 to 20mA
Open wire current	<3.7mA
Wiring scheme	2 wire

8.6.5 Associated part numbers

Sl #	Part details	Model number	Part number
1	FTA assembly	CC- UGIA01	51156590-100
3	MTC cable		51156516

8.6.6 Label



 NOTE	When the QR code is scanned, the following link will be opened. https://www.honeywellprocess.com/library/marketing/tech-specs/Analog-Output-Barrier-CC-UGAO01.pdf
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8.6.7 List of IO modules supported

1	CC-PAON01	CC-TAON01, CC-TAON11	AO	Analog Output with non-HART
2	CC-PAOX01	CC-TAOX01, CC-TAOX11	AO	Analog Output with non-HART
3	CC-PAOH01	CC-TAOX01, CC-TAOX11	AO-HART	Analog Output with HART
4	CC-PUIO31	CC-TUIO31, CC-TUIO41	UIO-2	UIO-2

8.6.8 Fuse rating

Field side terminals of FTA assembly is provided with options for install M5 x 20mm glass fuse. In the case of Div2/zone2 installations instructions provided in HAZLOC manual to

be followed. Exact current rating of the fuse may be decided based on the functional load current for a given IO.

8.6.9 Protection scheme

- Power supply terminals of the modules are provided with reverse polarity protection
- Power rail is provided with inrush current control
- Field side terminals are provided with short circuit protection and reverse polarity protection
- Modules are provided with mistake proofing keys

8.6.10 Conditions of use

Refer to HAZLOC manual (document number 50149737) for conditions of use.

8.7 Universal Analog Output barrier (model CC- UAOA01)

CC-UAOA01 is a single channel galvanically isolated analog output module which supports 4-20mA with HART. This module takes input from DCS and reflect this signal to the field.

8.7.1 Module physical specification

Dimensions	141.5mm (L) x 85.75mm (W) x10mm (H)
Assembly option	Backplane mount, screw less
Mistake proofing	mistake proofing keys provided

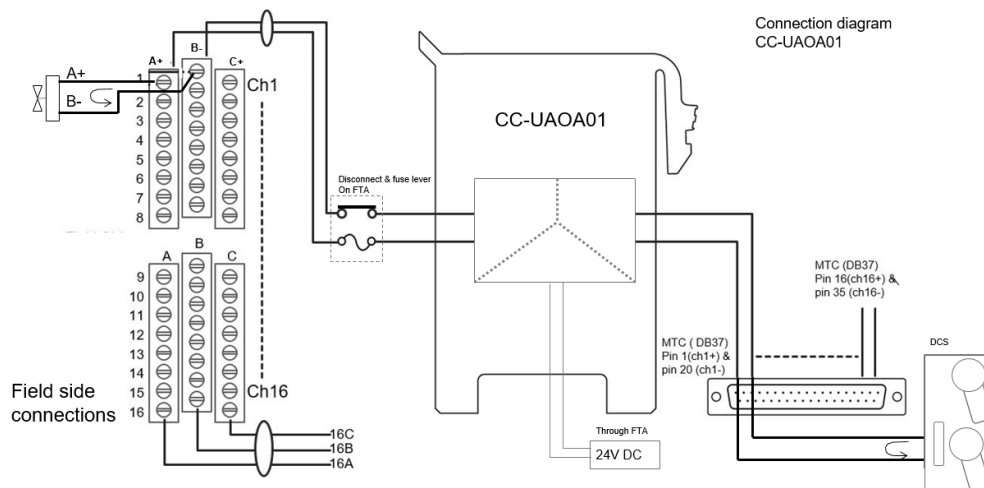


8.7.2 Features

- Single channel Isolated Analog Output module.

- Transparent Open Wire Detection
- 3-way Isolation
- Supports HART communication
- Reverse Polarity Protection
- Power LED indication

8.7.3 Connections diagram



			Field side of CC-UAOA01 module		DCS side of CC-UAOA01 module
Wiring mode	4-20mA	HART	Source mode	Sink mode	Source mode
2 wire	✓	✓	✓		✓

8.7.4 Specification

Parameter	Specifications
Physical Specification	
Dimensions	141.5mm (L) x 85.75mm (W) x10mm (H).
Assembly option	Back-plane mount, screw less
Indicators	Power ON (green LED)
Ambient Conditions	
Ambient temperature (operation)	-40°C to + 70°C
Ambient temperature (storage/transport)	-40°C to + 85°C
Permissible humidity (operation)	5 % - 95 % (non-condensing)

Vibration	Non-Operational 1g 10Hz to 150Hz, Operational 0.5g 10Hz to 150Hz
Shock	5g operational, 15g Non-Operational
Enclosure and Mounting	
Assembly	Base plate and housing
Mounting	Base plate with DIN rail mount & snap housing to the base plate
Electrical Specifications	
Power	24V DC
Rated Current	55mA at 24V
Power Consumption	1.32W at 20mA
Power dissipation	1.22W at 24V DC with 20mA loop current & 250 ohm load
Field side wire gauge	12-24 AWG
Compliance	
Ingress protection	IP20 as per IEC 60529
Flammability rating	V0 as per UL 94
Conformance	ANSI/ISA 60079-0; 60079-15
EMC directive	2014/30/EU (IEC 61326-1 2012)
Certification	IEC Ex, ATEX, cCSAus
Compliance	RoHS

<u>Galvanic Isolation</u>	
Input to output	1500 VAC
<u>HAZLOC side interface</u>	
Input Channels	1 per module
Transfer accuracy at 20°C	+/- 20uA
Max load	650 ohms
Type of devices connected	2 wire type

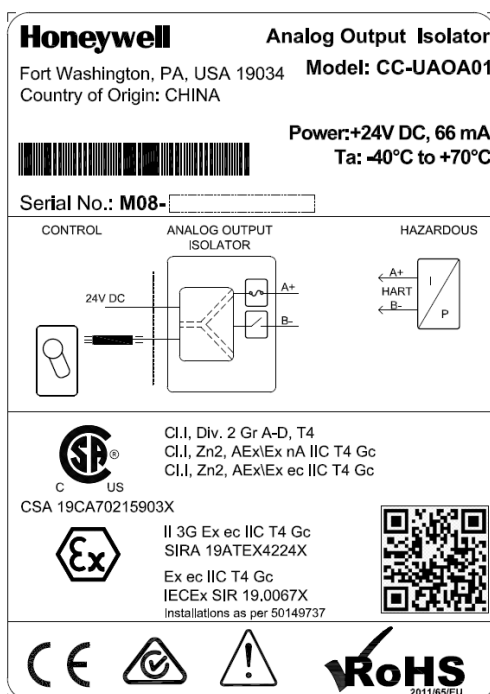
Influence of ambient temperature	Influence of ambient temperature reference to +20°C a. -30 °C to +70°C : 2uA /°C b. -40 °C to -30°C : 6uA /°C
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Safe side interface	
Voltage Input	24V DC
Current Input	4 to 20mA
Open wire current	<3.7mA
Wiring scheme	2 wire

8.7.5 Associated part numbers

Sl #	Part details	Model number	Part number
1	FTA assembly	CC- UGIA01	51156590-100
3	MTC cable		51156516

8.7.6 Label





NOTE

When the QR code is scanned, the following link will be opened.

<https://www.honeywellprocess.com/library/marketing/tech-specs/Analog-Output-Isolator-CC-UAQA01.pdf>

8.7.7 List of IO modules supported

1	CC-PAON01	CC-TAON01, CC-TAON11	AO	Analog Output with non-HART
2	CC-PAOX01	CC-TAOX01, CC-TAOX11	AO	Analog Output with non-HART
3	CC-PAOH01	CC-TAOX01, CC-TAOX11	AO-HART	Analog Output with HART
4	CC-PUIO31	CC-TUIO31, CC-TUIO41	UIO-2	UIO-2

8.7.8 Fuse rating

Field side terminals of FTA assembly is provided with options for install M5 x 20mm glass fuse. In the case of Div2/zone2 installations instructions provided in HAZLOC manual to be followed. Exact current rating of the fuse may be decided based on the functional load current for a given IO.

8.7.9 Protection scheme

- Power supply terminals of the modules are provided with reverse polarity protection
- Power rail is provided with inrush current control
- Field side terminals are provided with short circuit protection and reverse polarity protection
- Modules are provided with mistake proofing keys

8.7.10 Conditions of use

Refer to HAZLOC manual (document number 50149737) for conditions of use.

8.8 Universal Digital Input Output barrier (model CC- UGDA01)

CC-UGDA01 is a single channel galvanically isolated digital input/output barrier module. This module configure itself to DI/DO mode based on IO module type interfaced at DCS side. DIO module also supports DI NAMUR mode.