

■ INT-AI-8CH*ISO Interface Unit

8 channels - isolated analog input 4-20mA for 2, 3, or 4-wire transmitter, or 1-5V

Description:

The INT-AI-8CH-ISO interface unit provides an input / output galvanic isolation for eight channels that can be either 4-20mA signals coming from 2, 3 or 4-wire transmitters or 1-5V analog signals. Each channel provides the 24Vdc transmitter power supply for the 2 or 3-wire transmitters but accepts the transmitter with their own power supply. Each channel can be configured using a switch either as 4-20mA or as 1-5V analog input. Each channel is converted after isolation into a 4-20mA signal. The Hart communication pass through, from the input loop (4-20mA) to the output loop. Each input from each channel is isolated from the output but the inputs are not isolated ones from each others.



Product options:

- Option **ST**:INT-AI-8CH-ISO-**ST**: Instruments connection using Screw Terminals
- Option **CCT**:INT-AI-8CH-ISO-**CCT**: Instruments connection using Cage Clamp or spring Terminals



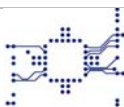
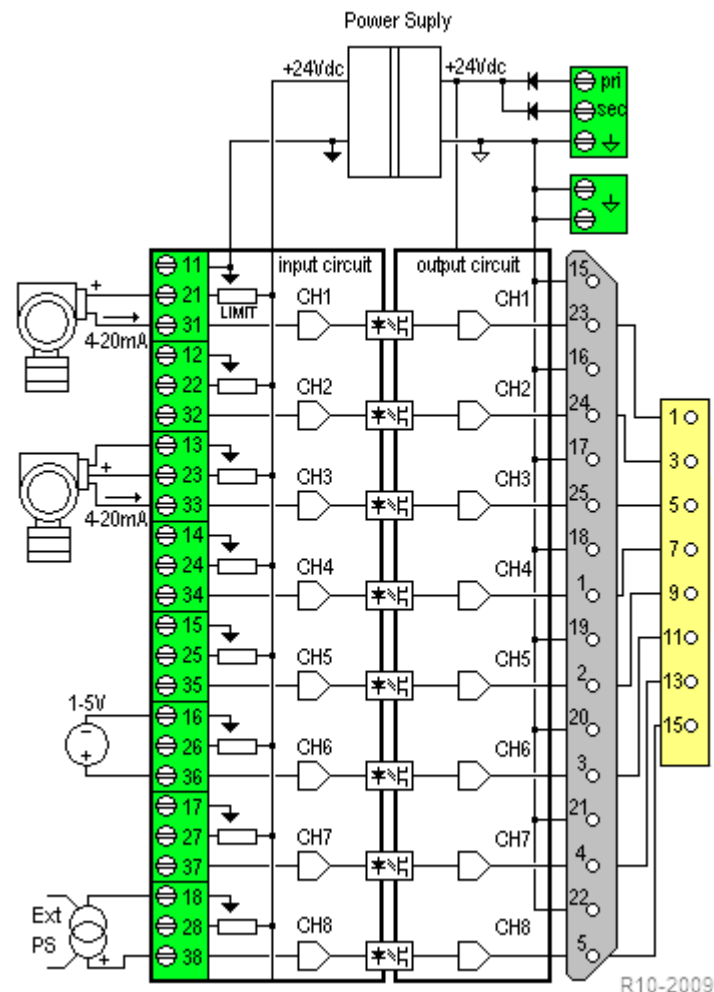
Main characteristics:

Galvanic Isolation between Input and Output

Accepts two Power Supplies for redundancy

8 channels for 2, 3 or 4-wire transmitters or 1-5V input, configurable by switch channel per channel

HART communication pass through (4-20mA input)



Technical specifications

Power Supply (primary and secondary)

Voltage range:	21Vdc to 28Vdc
Power ON indication:	By green Led
Consumption (24Vdc):	0.5A with all channels at 100%
Main fuses:	1A 250V quick action for prim & sec power supply
Protection:	Against reverse polarity and over voltage

Input specifications for each channel

Select mA input or voltage input:	Using an internal jumper (remove the cover)
Protection:	Against over voltage and short circuit
Input impedance for a 4-20mA input:	About 250 ohms
HART input impedance:	>250 ohms
Transmitter Power Supply at 20mA:	15Vdc +/- 0.5V
Transmitter Power Supply ripple:	< 0.5%
Transmitter Power Supply current limitation:	24.5mA +/- 0.5mA
Input impedance for a 1-5V input:	1Mohm

Output specifications for each channel

Current:	4-20mA
Low limit:	< 0,1mA (open input circuit)
High limit:	30mA +/- 1mA
Max load:	500 ohms at 20mA output

Transfer characteristics for each channel

Accuracy at 20°C ambient:	Better than 0,15%
Response time:	90% of the final value within 50ms.
Operating temperature:	-10°C to 50°C
Storage temperature:	-20°C to 60°C
Relative humidity:	10 to 90% (no condensation)
Drift:	0,01%/°C
Isolation Voltage (Input / output):	1500Vdc
Common mode rejection at 220v:	DC: without measurable effect AC (50Hz): 120 dB

Mechanical characteristics

Protection:	IP20
Wiring conductor section:	Screw Terminal (ST): 24 to 12 AWG Cage Clamp Terminal (CCT): 24 to 14 AWG
Connection to the PLC or the DCS:	Using a SUBD25 pin male connector with UNC 4-40 female lock, or a HE10-16 pin connector
Shield connection:	By a screw "SHD"
Weight:	400g
Size:	H=130mm W=210mm D=55mm.
Mounting:	Asymmetric or symmetric DIN rail