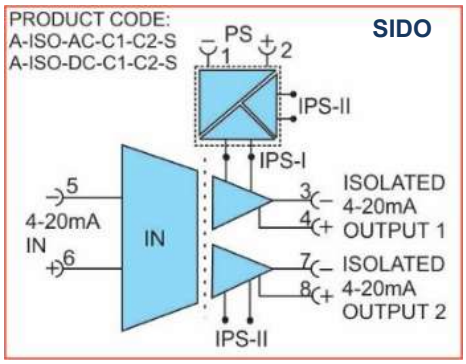
SIGNAL ISOLATORS
ISOLATING CURRENT TRANSMITTER / REPEATER / ISOLATION BARRIER

YUTECH DATASHEETS

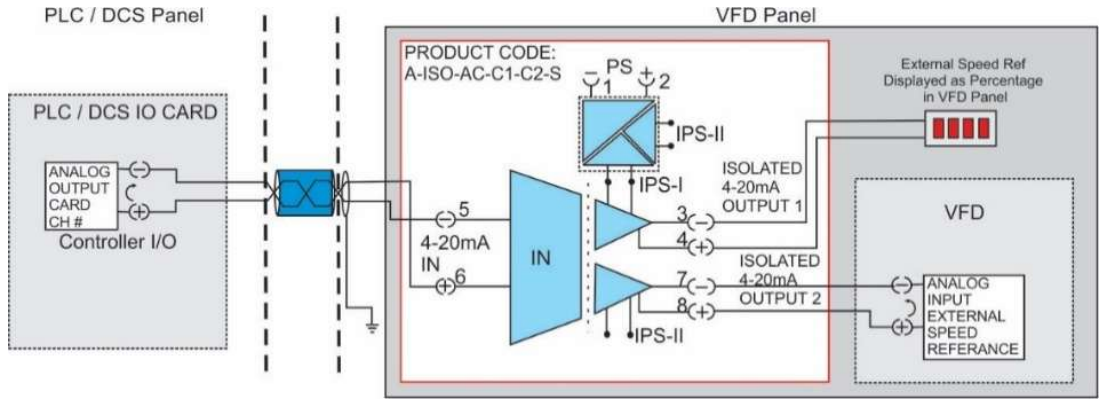
SIGNAL ISOLATOR: DC CURRENT ISOLATOR SINGLE INPUT DUAL OUTPUT (SIDO)
INPUT: 4-20mA
OUTPUT: TWO CHANNELS OF 4-20mA OUTPUT
POWER SUPPLY: CHOICE OF AC OR DC POWER SUPPLY
DC POWER SUPPLY: 16VDC TO 36 VDC, RECOMMENDED - 24VDC
AC POWER SUPPLY: 85VAC TO 265VAC, 50Hz / 60Hz
THRESHOLD VOLTAGE OF THE ISOLATION BARRIER: 5KV RMS



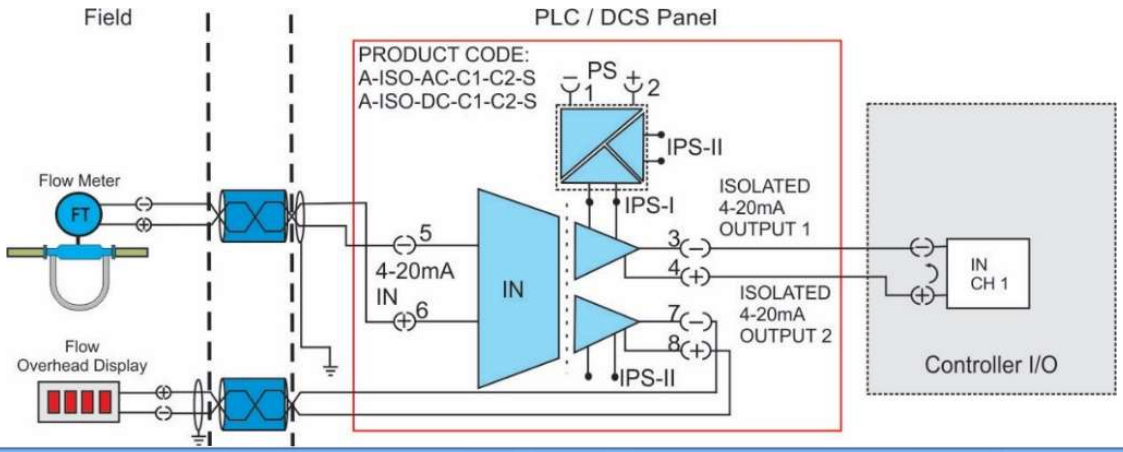


APPLICATION NOTES: SIGNAL ISOLATOR CAN BE USED IN THE PLC / DCS INPUT LOOP OR OUTPUT LOOP, AS SHOWN IN THE EXAMPLES BELOW. ONE OF THESE SIGNAL REPLICAS GOES TO THE CONTROLLER AND THE OTHER GOES TO THE OVERHEAD DISPLAY (OR ANY OTHER EQUIPMENT AS REQUIRED FOR THAT APPLICATION).
PLEASE TAKE NOTICE THAT THE SHIELDING IS ALWAYS GROUNDED ON THE SIDE THAT RECEIVES THE SIGNAL.

PLC / DCS OUTPUT LOOP



PLC / DCS INPUT LOOP



SIGNAL ISOLATORS

DC OR AC CURRENT OR VOLTAGE ISOLATION BARRIERS, SIGNAL SPLITTERS, CT CONVERTERS, TEMPERATURE TRANSMITTERS

YUTECH™ SINCE 1978

DATASHEETS

SIGNAL ISOLATOR SPECIFICATIONS: PRODUCT CODE:

ENCLOSURE	:	MATERIAL OF CONSTRUCTION – ABS / NYLON, RECTANGULAR SHAPE, DIN RAIL MOUNTED
ENCLOSURE DIMENSIONS	:	W: 22.5mm
INGRESS PROTECTION	:	ENCLOSURE IS IP 40, SHOCK AND CONTAMINATION PROOF
FLAMMABILITY	:	FOR ENCLOSURE - CLASS V0 ACCORDING TO UL 94.
AMBIENT TEMP.	:	-20°C TO 55°C
POWER CONSUMPTION	:	1W MAXIMUM
CHOICE OF AC OR DC POWER SUPPLY	:	DC: 16 TO 36 VDC, WE RECOMMEND 24 VDC STANDARD POWER SUPPLY. AC: 85 TO 265VAC, 50 / 60HZ, 110 OR 230VAC STANDARD PS RECOMMENDED.
AUXILIARY POWER SUPPLY	:	NOT AVAILABLE IN THIS MODEL
POWER SUPPLY ISOLATION	:	3 POINT, AC OR DC POWER SUPPLY INTERNALLY ISOLATED FROM INPUT AND OUTPUT PS.
BARRIER VOLTAGE	:	THRESHOLD VOLTAGE OF ISOLATION BARRIER IS 5KV RMS
ISOLATION TYPE	:	OPTICAL
INPUT SIGNAL	:	4-20MA ONE CHANNEL
LOOP VOLTAGE DROP	:	5VDC DROP ACROSS INPUT, FOR 4-20MA INPUT CIRCUITS.
PROTECTIONS	:	REVERSE LOOP PROTECTION FOR DC POWER SUPPLY, EMI & RFI FILTERS FOR INPUT SIGNAL
OUTPUT SIGNAL	:	4-20MA REPEATED AS PER INPUT SIGNAL ACROSS THE BARRIER ON TWO CHANNELS
MAX OUTPUT LOAD	:	600 OHMS PERMISSIBLE RESISTIVE LOAD FOR CURRENT OUTPUT
MAX NON-LINEARITY	:	±0.1% WITH RESPECT TO FULL SCALE RANGE AT MAXIMUM AMBIENT TEMPERATURE.
OUTPUT CALIBRATION	:	**A-ISO** RANGE OF PRODUCTS: ON FASCIA, ZERO, AND SPAN ADJUST BY TRIM POT. **A10ISO** RANGE OF PRODUCTS: ON FASCIA, ZERO, AND SPAN ADJUST BY KEYBOARD

DECODING ISOLATOR PRODUCT CODE:

Item Description	Item Code	Item Specification
Product	A-ISO	Isolators have Analog Circuitry with Zero, and Span adjust by Trim pots.
Description	A10ISO	A-10 Series Isolators have a Micro Controller based Circuitry with a keyboard.
Power Supply	DC / AC	Power Supply Voltage 16-36VDC recommended 24 VDC or Voltage 85 to 265 VAC.
	AP24	24 VDC Auxiliary Power Supply for Two Wire Transmitter.
	XX	No External Power Supply is required, this current isolator is loop-powered.
Input / Output Combinations	C# / V# / U# / R# / RT# / TC& / VH / M# / LTCT / HTCT / AMV / AVH / F / FH	C is 4-20mA, V is 0-10VDC, U is Universal, R is Resistance (0-1000 Ohms), RT is 3W-RTD-PT100, RT4 is 4W-RTD-PT100, RTK is 4W-RTD-PT1000, TC& is Thermocouple, here "&" is replaced by J / K / B / S / R / T for TC Type, VH 0-100VDC, M is 0-1000mVDC, LTCT is Low Tension CT, HTCT is High Tension CT, AMV is 0-1000mVAC, AVH is for 0-100VAC, F is for 0-10KHz @ 1 to 10V, FH is for 0-10KHz @ 20-100VAC
Number of Channels	#	Here "#" is the number of Input or Output Channels. Ex: C1 means 1 Input or Output and C2 means 2 Inputs or Outputs, similarly V1 or V2.
Enclosure	S	Standard 22.5mm Width.
	M	Medium 45mm Width.

PRODUCT CODES FOR DIFFERENT INPUT AND OUTPUT COMBINATIONS:

PRODUCT CODE	ANALOG INPUT	ANALOG OUTPUT	POWER SUPPLY	DINRAIL MOUNTED ENCLOSURE	INTERNAL NAME
AISOACC1C2S	4-20mA	4-20mA x 2	85-265 AC/DC	22.5mm W	SIDO
AISODCC1C2S	4-20mA	4-20mA x 2	16-36VDC	22.5mm W	SIDO

PLEASE CHECK THE DATASHEETS AND APPLICATION NOTES FOR VARIOUS ISOLATION PRODUCTS AND ORDERING INFORMATION.

YU Technologies Pvt. Ltd.
HO & Works: B 8/5, MIDC, Miraj, 416 410,
Distt: Sangli, Maharashtra, India.
T: +91 916 832 4851, +91 911 224 9727 / 8 / 9.
E: info@yutech.in; sale@yutech.in
W: www.yutech.in; www.yutechautomation.com

CERTIFICATIONS:

ISO 9001: 2015

CE

CHANNEL PARTNER