# **DATA SHEET** – Process Automation – Industrial I/F

Subject to change without notice



### MODEL:- II-059

Powered Dual Analog Input with Math's Function(s) Output



#### **GENERAL DESCRIPTION**

The II-059 is a fully isolated maths module that takes the same inputs of 2 x 4-20mA or 2 x 0-10Vdc inputs (inputs A and B) and applies 10 math's functions to those Analog inputs and has a resultant output in a similar analogue format. Math functions Include the following:

**SUM** = Summation of the two inputs (A+B)

AVE = Average of the two inputs (A+B)/2

SUB = Subtraction of the two inputs (A-B) but input B must be equal to or less than input A.

MID = Mid-range of the two inputs (A-B)/2 if A=B output is mid-range.

MINUS = Difference |A - B| the difference of the two inputs regardless which is higher.

MULT = Multiplication of the two inputs (A\*B) full range for both inputs = 20mA/10V output.

DIV = Division of the two inputs (A/B) assuming A<B.

MAX = Maximum of the two inputs

MIN = Minimum of the two inputs

INV = Inversion of input A, input B is ignored (-A)

#### **TECHNICAL DATA**

Supply Voltage Input Current (per input) Input Voltage (per input) Other inputs 12Vdc, 24Vdc, 48Vdc OR 12Vac, 24Vac, 48Vac

Input A & B = 4-20mA Input A & B = 0-10Vdc Enquire on the factory

Output Current: 4-20mA or 0-10V. The output can be different to the

inputs,

Example: 2 x 4-20mA inputs and a 0-10Vdc output.

#### **FEATURES**

- ♦ Wide operating supply voltage range 10-72Vdc.
- ♦ Switch selection for math's function.
- Wide ambient operating temperature range.
- LED for power on
- Four port isolation to 1500Vdc
- DIN rail mounted.
- ♦ Small footprint 17.5mm width

## GENERAL SPECIFICATION

Input Voltage 10-72Vdc and 9-48Vac
Long term drift < <0.1% of span per 10,000hrs
Isolation level 1500Vdc

Creepage distance >2.5mm (port to port)

Output noise 3.2uA rms (typical)
Accuracy 0.1% of span
Linearity 0.1% of span
Repeatability 0.1% over 10,000 hrs.
Response time Nominally 100mSec

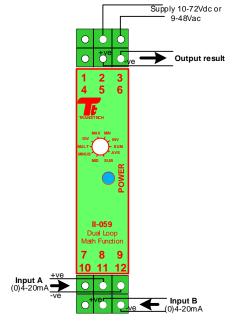
Indicators 1 x Blue Power ON LED
Operating Temp 0 to 70 Deg C
Storage Temp

Storage Temp 0 to 85 Deg C
Terminals Self-opening 2.5mm
Housing material KRILEN

Housing material KRILEN Mounting Style DIN Rail

Dimensions See drawing below.

Weight 250 grams.



#### **SCHEMATIC DIAGRAM**

