



*Manufacturers of Process  
Controls and Instrumentation*

# ***Instruction Manual***

Model: *IUC-XX-UNV*

Function: *Isolated Universal Signal Conditioner*

Input:  X=1: 1-5 mA       X=4: 10-50 mA  
 X=2: 4-20 mA       X=5: 1-5 VDC  
 X=3: 0-1 mA       X=6: 0-10 VDC  
 X=7: \_\_\_\_\_       X=8: \_\_\_\_\_  
 X=9: \_\_\_\_\_

Output:  X=1: 1-5 mA       X=4: 10-50 mA  
 X=2: 4-20 mA       X=5: 1-5 VDC  
 X=3: 0-1 mA       X=6: 0-10 VDC  
 X=7: \_\_\_\_\_

Power:  117 VAC, 60 Hz, 6 VA  
 24 VDC, 160 mA  
 \_\_\_\_\_

Serial #: \_\_\_\_\_  
(If special or required)

For Technical Assistance And Questions Call  
USA: (734) 677-0459    CANADA: (905) 660-5336

## Restocking Policy

**All product returned to Pribusin Inc. in prime condition (not damaged, scratched or defaced in any way) within seven (7) months from the original date of shipment is subject to a 50% restocking charge. All product must be accompanied by a Return Authorization number (RA number) which must be obtained from Pribusin Inc. prior to returning any product.**

**After seven (7) months from the original date of shipment, products cannot be returned for restocking.**

**Custom designed products, modified products or all non-standard products may not be returned for restocking.**

## Warranty Policy

**Pribusin Inc. warrants equipment of its own manufacture to be free from defects in material and workmanship, under normal conditions of use and service, and will replace any component found to be defective, on its return to Pribusin Inc., transportation charges prepaid, within one year of its original purchase. Pribusin Inc. will extend the same warranty protection on equipment, peripherals and accessories which is extended to Pribusin Inc. by the original manufacturer. Pribusin Inc. also assumes noliability, expressed or implied, beyond its obligation to prelace any component involved. Such warranty is in lieu of all other warranties, expressed or implied.**

**Pribusin Inc.**

Manufacturers of Process  
Controls and Instrumentation

**Model: IUC-XX-UNV**

**Isolated Universal Signal Conditioner**  
For Special Purpose (Custom) Applications



### Standard Features:

High Input-Output-Power Isolation (1500VAC Test)

Industry Standard Input: 4-20 mA, 1-5 VDC, more (see back)

Industry Standard Output: 4-20 mA, 1-5 VDC, more (see back)

Up to 4 Analog Inputs and 4 Adjustable Function Parameters.

Form 'C' Contact Available

Microprocessor Controlled for High Accuracy and Flexibility

Easy Field Calibration (Typ. calibration time < 2 min. using handheld meter only)

Two Wire Supply for Two Wire Transmitters

Power: 117 VAC 50/60 Hz

High Noise Rejection

CSA and NRTL Approved (LR 51078)

### Function:

The IUC-XX-UNV is the basic hardware platform for many specialized signal conditioning applications. Its programmable microprocessor allows for complex and highly accurate mathematical signal manipulation functions.

Four variable potentiometers are available for additional function adjustability or for setting constants or operating parameters. In addition, there are jumpers available to further define and select modes of operation.

The output of the IUC-XX-UNV can be one or two analog outputs, one or two relay outputs, or one relay and one analog output.

**DO NOT ORDER THIS INSTRUMENT WITHOUT CONSULTING FACTORY OR REPRESENTATIVE FIRST**

### Calibration:

All Calibration is done via multi-turn potentiometers. Each potentiometer has a test point associated with it. The test point shows a voltage of 0-5 VDC representing 0-100% of the parameter setting on the potentiometer. This makes for very easy field adjustment even with the instrument under power and running.

### Specifications:

Isolation: Input to Output to Power 1500 VAC (test)

Input Impedance (4-20mA only): 250 Ohms

Accuracy/Linearity: +/- 0.3% max., +/- 0.1% typ.

Operating Temperature: -40 Deg.C. to +50 Deg.C.

Temperature Effects: +/-0.5% max., +/-0.2% typ.

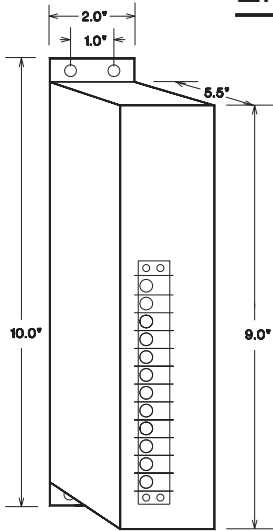
(for 40 Deg.C. change)

Contact Rating: 10A 1/8Hp @ 125VAC

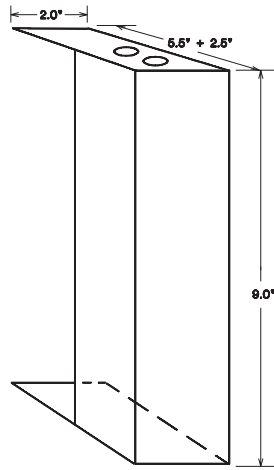
6A 1/8Hp @ 277VAC

# IUC-XX-UNV

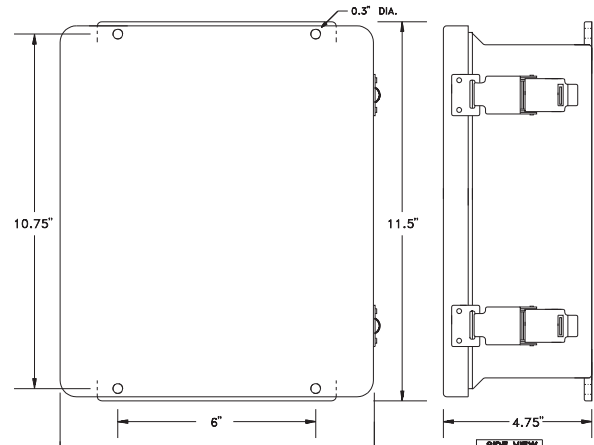
## Enclosures & Dimensions:



Standard Metal Enclosure

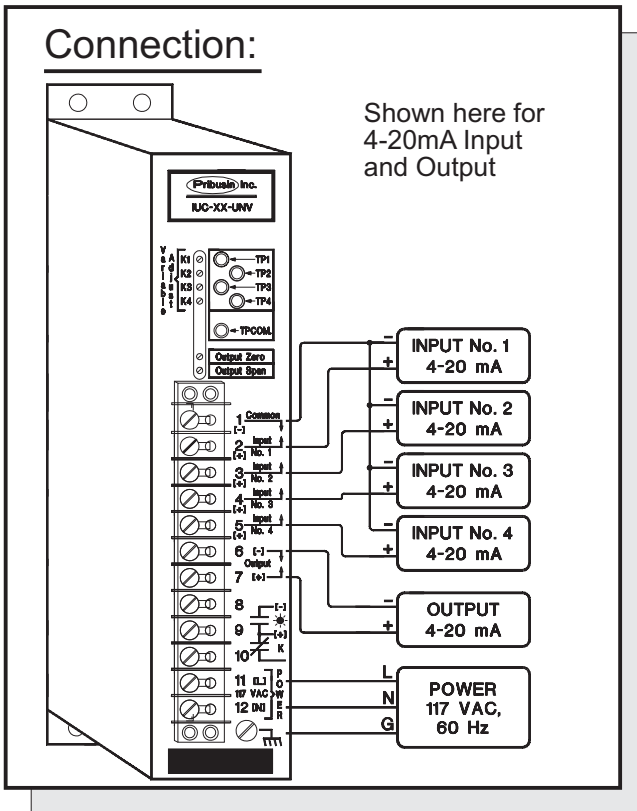


Conduit Cover Option  
for Metal Enclosure



NEMA 4X Option

## Connection:



## Model Designation:

IUC-XX-UNV

Input

Output

- 1: 1-5 mA (Zin=1K Ohm)
- 2: 4-20 mA (Zin=250 Ohm)
- 3: 0-1mA (Zin=5K Ohm)
- 4: 10-50 mA (Zin=100 Ohm)
- 5: 1-5 VDC (Zin=1Meg Ohm)
- 6: 0-10 VDC (Zin=1Meg Ohm)
- 7: Special Input

- 1: 1-5 mA (4000 Ohm Drive)
- 2: 4-20 mA (1000 Ohm Drive)
- 3: 0-1 mA (20000 Ohm Drive)
- 4: 10-50 mA (250 Ohm Drive)
- 5: 1-5 VDC (Zout=250 Ohm)
- 6: 0-10 VDC (Zout=500 Ohm)
- 7: Special Output
- 8: Pulse Output
- 9: Frequency Output

If no options specified, unit is 117 VAC Power in metal enclosure

## Options: (Add letters to end of Model Number)

- A - 24 VDC Prime Power
- B - 240 VAC Prime Power (not CSA approved)
- T - 200 mA Two Wire Supply (24 VDC unreg.)
- C - Conduit Cover for Metal Enclosure (see above)
- N - NEMA 4X enclosure (see above)

Manufactured By:



www.pribusin.com  
info@pribusin.com

### USA:

Pribusin Inc.  
743 Marquette Ave.  
Muskegon, MI 49442  
Ph: (231) 788-2900  
Fx: (231) 788-2929



### CANADA:

Pribusin Inc.  
101 Freshway Dr. Unit 57  
Concord, Ontario, L4K 1R9  
Ph: (905) 660-5336  
Fx: (905) 660-4068