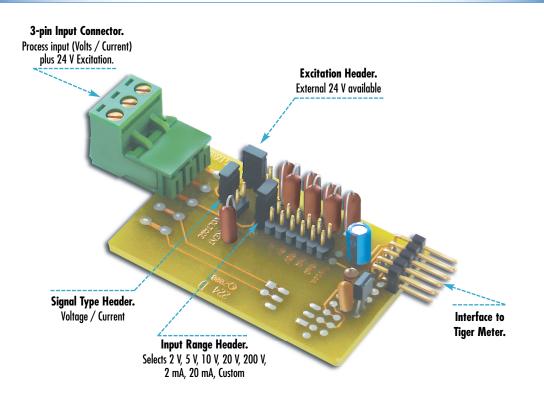


## **UNIVERSAL PROCESS INPUT**



#### Introducing IP07 – The mainstay in process interfacing.

IPO7 is a versatile input module presented as a general purpose interface to a wide range of DC voltage or milliamp signal inputs. With an external excitation voltage available to power transducers and on-board selectable headers for interface options, IPO7 is the ideal choice between the process inputs and your Texmate controller.

## Input Module Order Code Suffix

IPO7

	Hardware Module Specifications
Signal Type	Choice of DC volts or DC current (header selectable).
Voltage Ranges	2 V, 5 V, 10 V, 20 V, and 200 V DC (header selectable).
	(Input Impedance approximately 1 megohm)
Current Ranges	2 mA, 20 mA, 1 Custom (header selectable).
	(200 mV drop across shunt resistor)
	· · · · · · · · · · · · · · · · · · ·
External Excitation	+24 V DC (150 mA maximum).
Interface	Tiger 320 Series and Leopard range.
Accuracy	0.05% of reading.
,	
Temperature Drift	Typically 50 ppm/°C.
·	



Fits Leopard & Tiger 320 Series

PROCESS INP INPUTS PROCESS 4/20 mA 2/5/10/20/200 V

NIVERSAL

# Connector Pinouts & Module Layout

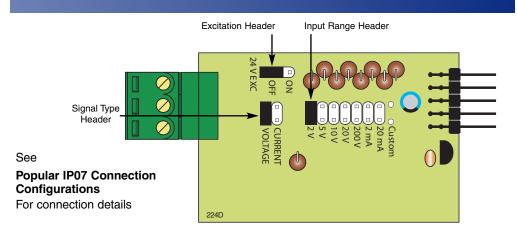


Figure 1 - IP07 Component Layout

# Technical Description

Figure 2 is an IP07 signal flow diagram showing the input signal flow through the signal type, voltage range, and current range headers to the Tiger or Leopard controller for further processing. The signal type header channels the input signal to either the voltage or current range header, which is set to suit the input voltage or current.

For Tiger or Leopard controller supplied +24 V DC excitation, set the excitation header to ON. If excitation is supplied externally (e.g. from the transducer) set the excitation header to OFF.

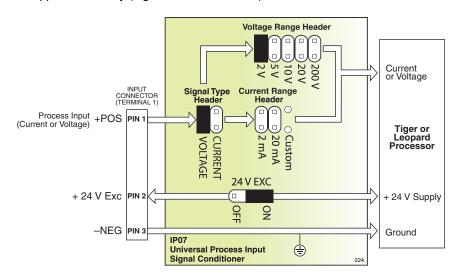


Figure 2 - IP07 Signal Flow Diagram

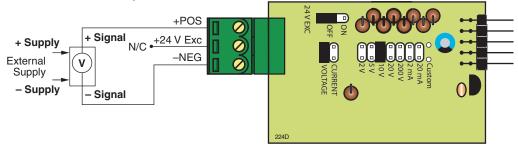
# Popular IP07 Connection Configurations

Table 1 provides a list of process input signals with and without external excitation and shows the appropriate header positions for each signal type. See diagrams on Page 3.

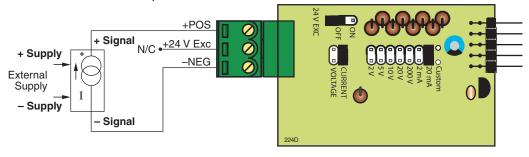
TABLE 1 POPULAR IP07 CONNEC	TION CONFI	GURATIONS & HEADER	POSITIONS			
Input	Header Positions					
Input	Excitation	Signal Type	Input Range			
External Excitation						
0-10 V Process Input	OFF	VOLTAGE	10 V			
0/4-20 mA Process Input	OFF	CURRENT	20 mA			
Controller Supplied Excitation +24 V (150 mA)						
Loop Powered Sensors (Current Mode)	ON	CURRENT	20 mA			
0-10 V Process Input	ON	VOLTAGE	10 V			
0/4-20 mA Process Input	ON	CURRENT	20 mA			

#### **External Excitation**

• 0 to 10 V Process Input.

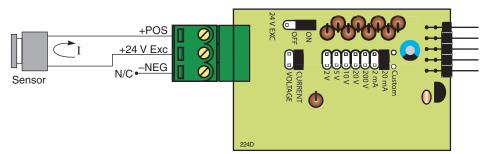


• 4 to 20 mA Process Input.

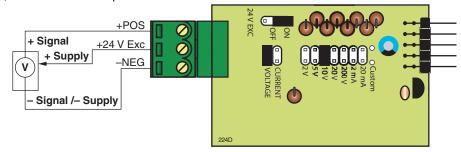


### Controller Supplied Excitation +24 V (150 mA)

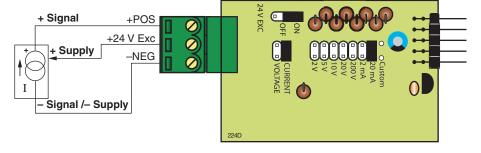
• 2-wire, Loop Powered Sensors (Current Mode).



• 3-wire, 0 to 10 V Process Input.



• 3-wire, 4 to 20 mA Process Input.



#### **Leopard Controller**

#### **Calibration**

Enter the Calibration Mode and set the [ZEro] and then the [SPAn] settings, while applying a low and then a high signal.

For a full set of calibration and decimal point placement procedures, see your relevant Leopard controller user manual.

#### Tiger Controller

#### **Calibration and Input Signal Type Selection**

Enter the Calibration Mode and then Code 2 to set the following calibration and input signal type settings for CH1:

 CAL
 000
 for CH1 select
 111
 CODE\_2
 000
 60 Hz Operation:

 CODE\_2
 100
 50 Hz Operation:

Code 2 frequency selection applies to all channels

Note, to calibrate the input signal for other engineering units use CH2, CH3, or CH4. These can be viewed by pressing the ♠ or ▶ button while in the operational display.

 for CH2 select
 112
 CODE\_4
 010

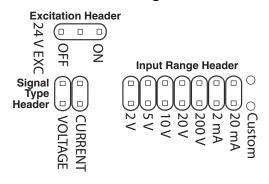
 for CH3 select
 113
 CODE\_5
 010

 for CH4 select
 114
 CODE\_6
 010

For a full set of calibration and decimal point placement procedures, see your relevant Tiger meter controller manual.

### **Customer Configuration Settings:**

### **IP07 Header Settings**



### **Calibration Settings**

	Volts	Amps	Display
Input Low			
Input High			

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