## PRESSURE SCANNER

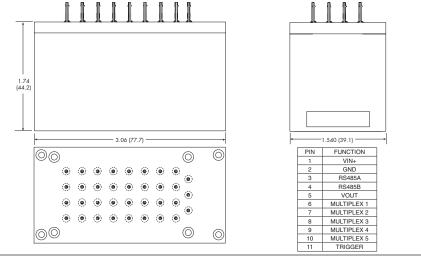
## **KMPS-1 SERIES**

- · High Accuracy Digital Compensation
- Multiplexed Analog Output
- High Speed Digital Output (RS-485)
- Temperature Output
- · No Heating or Cooling Needed
- Wide Temperature Range (-65°F to +250°F)
- Auto Zero
- Integral Purge

The KMPS-1 is a 32 position pressure scanner with both high accuracy digital and analog outputs. This allows it to be used with both legacy analog systems and new digital systems. The RS-485 digital output allows multiple scanners to be read over a single data bus. It also features purge and auto-zero capabilities.

The KMPS-1 has a trigger input for low latency triggered acquisition. Due to the wide temperature capability it does not require heating or cooling in wind tunnel, flight test and other harsh environments. The pressure transducers are individually replaceable as well as vibration and moisture resistant leading to extreme reliability.





INDUIT	
INPUT	
Pressure Ranges	5 - 700 PSI
Operational Modes	Differential or Absolute
Proof Pressure	2 Times Full Scale (Min.)
Burst Pressure	3 Times Full Scale (Min.)
Rated Electrical Excitation	8 to 32 VDC
Maximum Current	500 mA
Insulation Resistance	100 Megohms @ 50 VDC
ANALOG OUTPUT	
Output Impedance	< 100 Ohms
Full Scale Output (Analog)	.5 to 4.5 V
Resolution	16 Bit
Bandwidth (-3dB)	DC to 1000 Hz
Total Error Band	± 0.2% FSO
DIGITAL OUTPUT	
Interface	RS-485
Resolution (Pressure)	16 Bits or 0.0015% F.S.
Total Error Band (Pressure)	± 0.1% FSO (0 to 250°F) 0.25% (-65°F to 250°F)
Resolution (Temperature)	0.1°C or 0.1°F
Total Error (Temperature)	± 2.5°C (± 5°F)
Conversion Rate	500 Samples/Sec/Channel
Baud Rate	300 to 921,600 bpS
ENVIRONMENTAL	
Operating Temperature Range	-65°F to 250°F (-55°C to 120°C)
Compensated Temperature Range	-65°F to 250°F (-55°C to 120°C)
Linear Vibration	50g Peak, Sine 10 to 2000 Hz
PHYSICAL	
Electrical Connection	15 Pin Micro D-Sub
Weight	500 Grams
Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon
Pressure Port	.040 Bulged Tubulations
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