



PRESSURE SCANNER

KMPS-1-64 SERIES

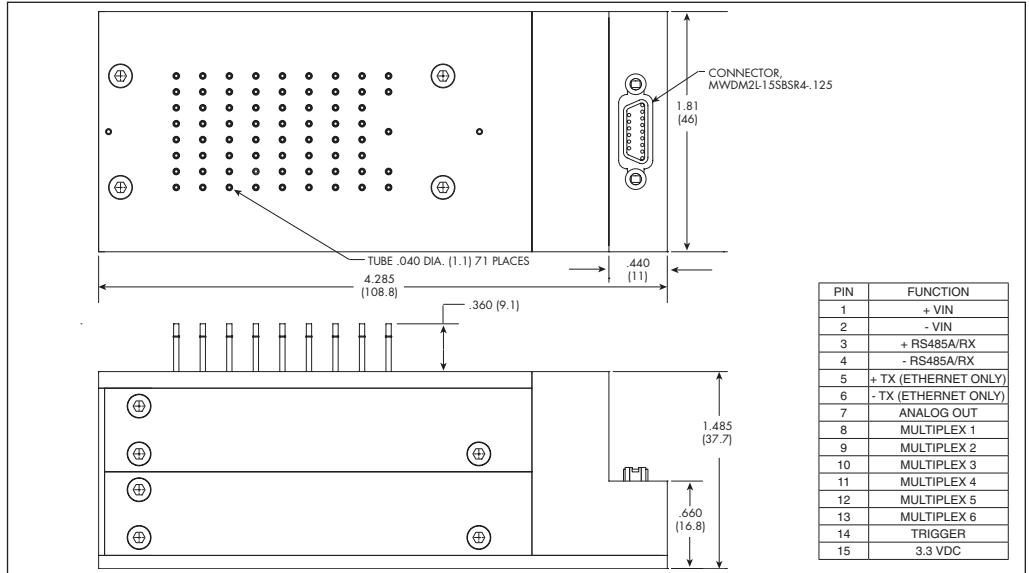
- High Accuracy Digital Compensation
- Multiplexed Analog Output
- High Speed Digital Output (RS-485 or Ethernet)
- Temperature Output
- No Heating or Cooling Needed
- Wide Temperature Range (-65°F to +250°F)
- Auto Zero
- Integral Purge



The KMPS-1-64 is a 64 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. The ethernet digital output allows integration into standard networks using TCP or UDP. It also features purge and auto-zero capabilities.

The KMPS-1-64 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 vibration and moisture resistant leading to extreme reliability. Plates with 16 sensors each are individually replaceable by the user. This allows for different pressure ranges in the same scanner.

PATENT PENDING



INPUT	0.35	0.7	1.7	3.5	7	17	35	52 BAR
Pressure Ranges	5	10	25	50	100	250	500	750 PSI
Operational Modes	Differential			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	250 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 (Typ.)							
DIGITAL OUTPUT								
Interface	RS-485 or Ethernet							
Resolution (Pressure)	16 Bits or 0.0015% F.S.							
Total Error Band (Pressure)	± 0.1% FSO (0 to 250°F) (Typ.) 0.25% (-65°F to 250°F) (Typ.)							
Resolution (Temperature)	0.1°C or 0.1°F							
Total Error (Temperature)	± 2.5°C (± 5°F)							
Conversion Rate	250 Samples/Sec/Channel							
Baud Rate	300 to 921,600 bpS							
ENVIRONMENTAL								
Operating Temperature Range	-65°F to 250°F (-55°C to 120°C) RS-485				-65°F to 212°F (-55°C to 100°C) Ethernet			
Compensated Temperature Range	-65°F to 250°F (-55°C to 120°C) RS-485				-65°F to 212°F (-55°C to 100°C) Ethernet			
Linear Vibration	10g 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							

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters.

Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal. (A)

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