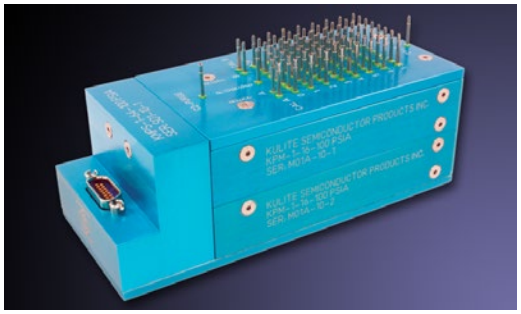
PRESSURE SCANNER

KMPS-1-64-XX-Y SERIES

KMPS-1H-64-XX-Y SERIES

- High Accuracy Digital Compensation
- Multiplexed Analog Output
- High Speed Digital Output (RS-485 or Ethernet)
- No Heating or Cooling Needed
- Wide Temperature Range
  -65°F to +255°F (-55°C to +125°C)
- Silicon on Silicon Integrated Sensor **VIS®**
- Auto Zero
- Integral Purge
- IEEE-1588 Timing

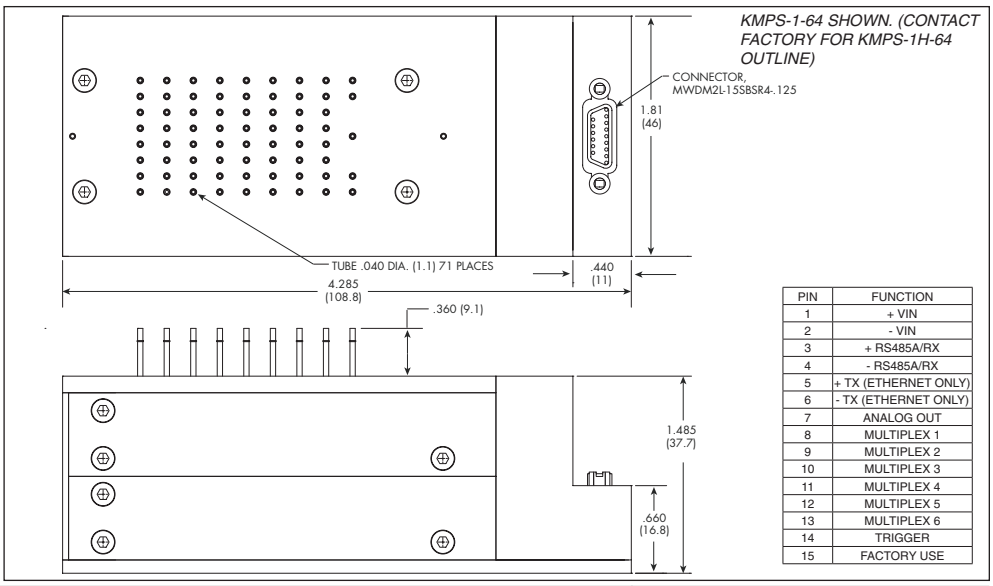
PATENT PENDING



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. The KMPS 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. Modules with 16 sensors each are individually replaceable by the user. This allows for different pressure ranges and modes (differential and absolute) in the same scanner. zero capabilities. The KMPS also has auto-zero capability.

For additional details see manual (KM 8000).



KMPS-1-64 SHOWN. (CONTACT FACTORY FOR KMPS-1H-64 OUTLINE)

PIN	FUNCTION
1	+ VIN
2	- VIN
3	+ RS485A/RX
4	- RS485A/RX
5	+ TX (ETHERNET ONLY)
6	- TX (ETHERNET ONLY)
7	ANALOG OUT
8	MULTIPLEX 1
9	MULTIPLEX 2
10	MULTIPLEX 3
11	MULTIPLEX 4
12	MULTIPLEX 5
13	MULTIPLEX 6
14	TRIGGER
15	FACTORY USE

		KMPS-1-64	KMPS-1H-64
INPUT	Pressure Ranges	0.35 0.7 1.7 3.5 7 17 5 10 25 50 100 250	35 50 BAR 500 750 PSI
	Operational Modes	Differential	Differential or Absolute
	Proof Pressure	2 Times Full Scale to a Maximum of 1000 PSI (70 BAR)	
	Burst Pressure	3 Times Full Scale to a Maximum of 1000 PSI (70 BAR)	
	Rated Electrical Excitation	8 to 32 VDC	
	Maximum Current	300 mA	
	Insulation Resistance	100 Megohms @ 50 VDC	
ANALOG OUTPUT	Output Impedance	< 100 Ohms	
	Full Scale Output (Analog)	0.5 to 4.5 V	
	Resolution	16 Bit	
	Bandwidth (-3dB)	DC to 1000 Hz	
	Total Error Band	± 0.5% FSO (Typ.)	
DIGITAL OUTPUT	Interface	RS-485 or Ethernet	
	Resolution (Pressure)	24 Bits or 0.0015% F.S.	
	Total Error Band (Pressure)	± 0.1% FSO 0 to 255°F (-18°C to 125°C) (Typ.) ± 0.25% -65°F to 255°F (-55°C to 125°C) (Typ.)	
	Conversion Rate	275 Samples/Sec/Channel	
	Baud Rate	300 to 921,600 bpS	
ENVIRONMENTAL	Operating Temperature Range	-65°F to 255°F (-55°C to 125°C)	
	Compensated Temperature Range	-65°F to 255°F (-55°C to 125°C)	
	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 or .063 Bulged Tubulations (60° angle or straight)	

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (G)

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