



PRESSURE SCANNER

KMPS-1-64-XX-YY SERIES

KMPS-1H-64-XX-YY SERIES

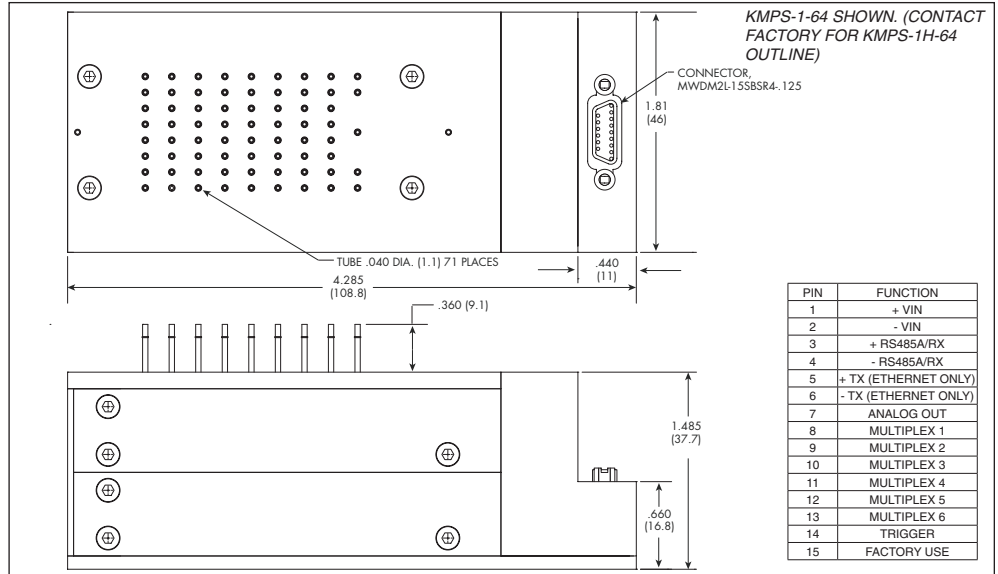
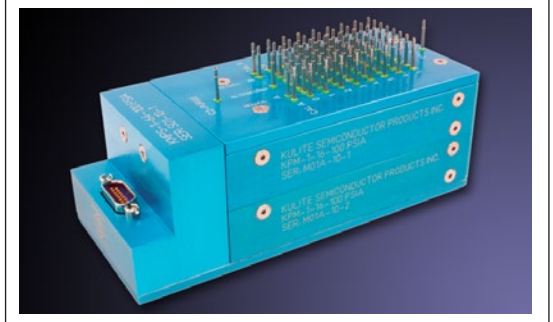
- High Accuracy Digital Compensation
- Multiplexed Analog Output
- High Speed Digital Output (RS-485 or Ethernet)
- No Heating or Cooling Needed
- Wide Temperature Range
-65°F to +255°F (-55°C to +125°C)
- Silicon on Silicon Integrated Sensor **VIS**[®]
- Auto Zero
- Integral Purge
- IEEE-1588 Timing

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.

For additional details see manual (KM 8000).

PATENT PENDING



| | KMPS-1-64 | | | | | | KMPS-1H-64 | |
|----------------------|-------------------------------|-----|--|-----|-----|--|------------|---------|
| | 0.35 | 0.7 | 1.7 | 3.5 | 7 | 17 | 35 | 50 BAR |
| INPUT | Pressure Ranges 5 10 | | 25 | 50 | 100 | 250 | 500 | 750 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 | | 300 mA | | | | | |
| | Insulation Resistance | | 100 Megohms @ 50 VDC | | | | | |
| 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.) | | | | | |
| ANALOG 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. (F) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved. Kulite miniature pressure transducers are intended for use in test and research and development programs and are not necessarily designed to be used in production applications. For products designed to be used in production programs, please consult the factory.