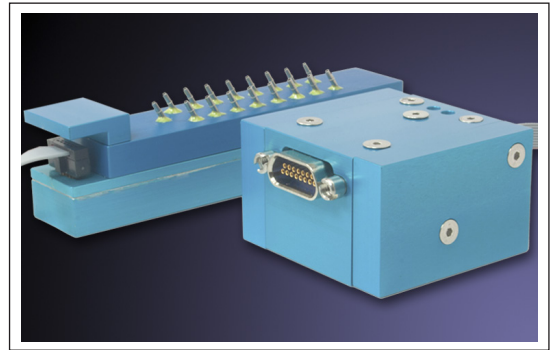


kulite
PRESSURE SCANNER
KMPS-4-64-XX-Y SERIES

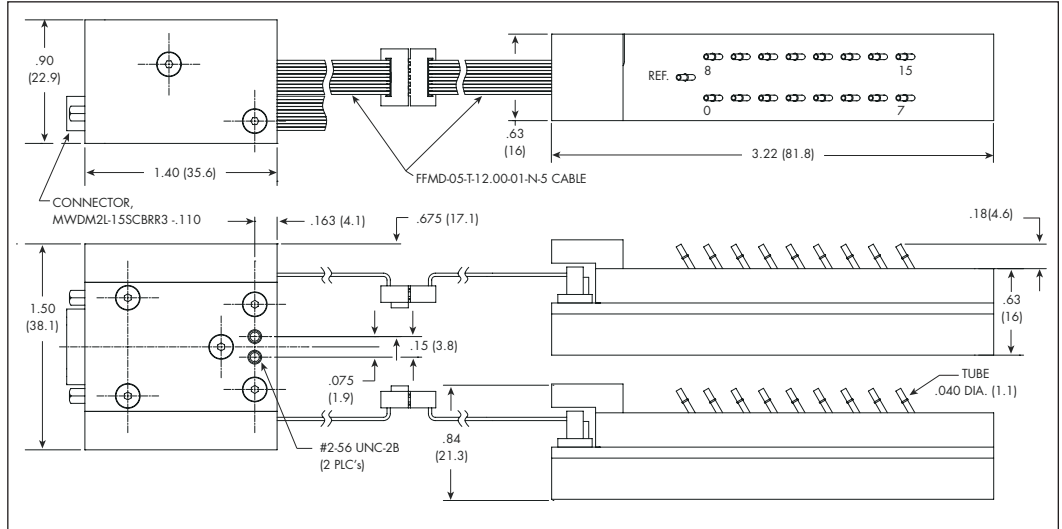
- High Accuracy Digital Compensation
- High Speed Digital Output (RS-485 or Ethernet)
- Wide Temperature Range -65°F to +255°F (-55°C to +125°C)
- Silicon on Silicon Integrated Sensor **VIS**[®]
- IEEE-1588 Timing
- Remote Modules
- Patented Design



The KMPS-4-64 is a 64 position pressure scanner with both high accuracy digital and analog outputs. The KMPS-4 electronics module can support up to four KPM-1-16 pressure modules each of which can be a different pressure range and mode. This allows the modules to be placed remotely from the electronics module for ease of installation in tight locations. 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-4-64 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.

For additional details see manual (KM 8000).



| PIN | FUNCTION |
|-----|----------------------|
| 1 | + VIN |
| 2 | - VIN |
| 3 | + RS485A/RX |
| 4 | - RS485A/RX |
| 5 | + TX (ETHERNET ONLY) |
| 6 | - TX (ETHERNET ONLY) |
| 7 | ANALOG OUT |
| 8 | MULTIPLY 1 |
| 9 | MULTIPLY 2 |
| 10 | MULTIPLY 3 |
| 11 | MULTIPLY 4 |
| 12 | MULTIPLY 5 |
| 13 | MULTIPLY 6 |
| 14 | TRIGGER |
| 15 | 3.3 VDC |

| | | | | | | | | | | |
|-----------------------|-------------------------------|--|--------------------|-----------|----------------------------|------------------|-----------|----------|-------------------|--|
| INPUT | Pressure Ranges | 0.07 1 | 0.14 2 | 0.35 5 | 0.7 10 | 1.7 25 | 3.5 50 | 7 100 | 17 BAR 250 PSI | |
| | Operational Modes | Gage | | | | Gage or Absolute | | | | |
| | Proof Pressure | 1.5 Times Rated Pressure to 300 PSI (21 BAR) Maximum | | | | | | | | |
| | Burst Pressure | 2 Times Rated Pressure to 300 PSI (21 BAR) Maximum | | | | | | | | |
| | 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) | ± 0.2% Typ. (± 0.5% Max.) | | | ± 0.1% Typ. (± 0.25% Max.) | | | | | |
| | Conversion Rate | 275 Samples/Sec/Channel | | | | | | | | |
| 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 | 20g Peak, Sine 10 to 2000 Hz | | | | | | | | |
| | Reference Pressure | 0-30 PSIA | | | | | | | | |
| | PHYSICAL | Electrical Connection | 15 Pin Micro D-Sub | | | | | | | |
| Weight | | .55 lbs (250 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) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2015 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.