



## PRESSURE SCANNER

### KMPS-3-64-XX-YY SERIES

### KMPS-3H-64-XX-YY SERIES

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

**PATENT PENDING**

The KMPS-3-64 is a 64 position pressure scanner with high accuracy digital output over either an RS-485 or Ethernet bus. There is an internal heater which keeps the internal temperature above freezing to avoid internal icing. An optional motor allows for digital control over the purge mechanism. The KMPS also features auto-zero capabilities. The KMPS-3-64 has a water resistant case ideal for outdoor testing.

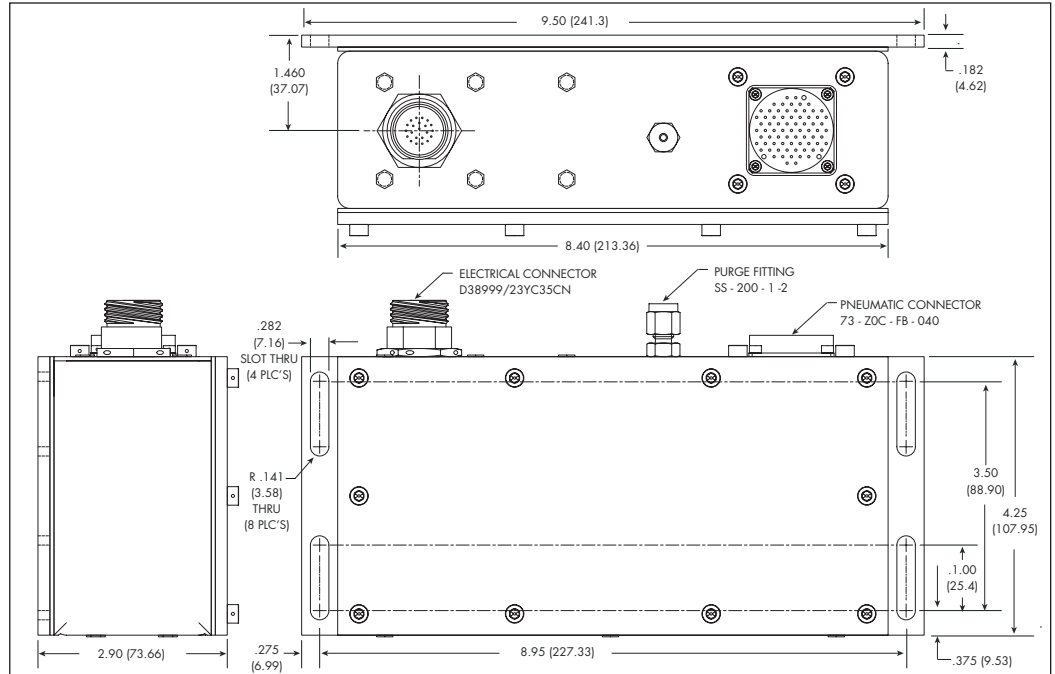
The KMPS-3-64 is ideally suited for the flight and ground test market. The Ethernet version features IEEE-1588 timing for precise correlation between multiple devices on the network. The pressure scanners are vibration and moisture resistant leading to extreme reliability. Modules with 16



sensors each are individually replaceable by the user. This allows for different pressure ranges and modes (differential and absolute) in the same scanner.

For more information see the KMPS-3 manual.

PIN DESIGNATIONS			
MOTOR PURGE			
	ETHERNET	RS485	RS485B
PIN	FUNCTION	FUNCTION	FUNCTION
1	RX +	N/C	N/C
2	RX -	N/C	N/C
3	TX +	N/C	N/C
4	TX -	N/C	N/C
5	N/C	N/C	N/C
6	N/C	N/C	N/C
7	N/C	N/C	N/C
8	N/C	N/C	N/C
9	PURGE +	PURGE +	SHORT TO 13
10	N/C	N/C	N/C
11	N/C	N/C	N/C
12	VIN -	VIN -	VIN -
13	PURGE -	PURGE -	SHORT TO 9
14	N/C	RS485 -	RS485 -
15	N/C	N/C	N/C
16	N/C	N/C	N/C
17	N/C	N/C	N/C
18	N/C	N/C	N/C
19	VIN +	VIN +	VIN +
20	N/C	RS485 +	RS485 +
21	N/C	N/C	N/C
22	N/C	N/C	N/C



INPUT		KMPS-3-64						KMPS-3H-64	
	Pressure Ranges	0.35 5	0.7 10	1.7 25	3.5 50	7 100	17 250	35 500	50 BAR 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	20 to 32 VDC							
	Maximum Current	300 mA + 2A For Heater							
	Insulation Resistance	100 Megohms @ 50 VDC							
DIGITAL OUTPUT	Interface	RS-485 or Ethernet							
	Resolution (Pressure)	24 Bits or 0.0015% F.S.							
	Total Error Band (Pressure)	0.25% -65°F to 255°F (-55°C to 125°C) (Typ.)							
	Conversion Rate	275 Samples/Sec/Channel							
	Baud Rate (RS-485)	RS485							
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	22 Pin Circular Threaded Connector (D38999/23YC35CN)							
	Weight	4 lbs. (1.8 kg)							
	Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon							
	Pressure Port	Pneumatic Quick Disconnect (73-Z0C-FB-040)							

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