

kulite
PRESSURE SCANNER
KMPS-3-64-XX-Y 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
- Patented Design

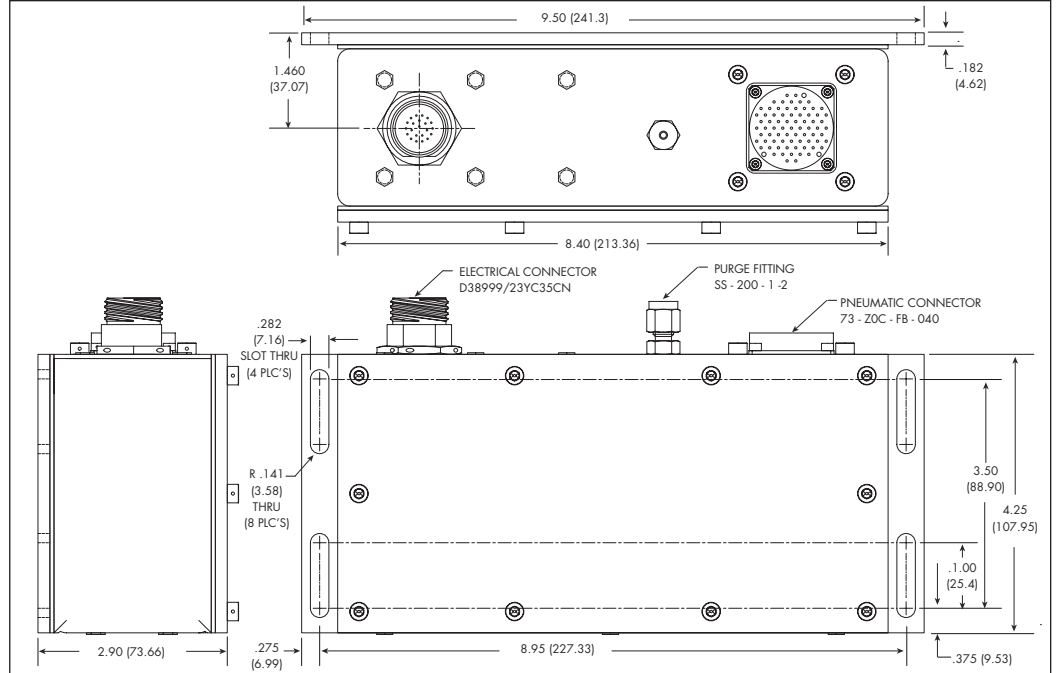


The KMPS-3-64 is a 64 position pressure scanner with high accuracy digital output over either an RS-485 or Ethernet bus. There is an internal heater which keeps the internal temperature above freezing to avoid internal icing. An optional motor allows for digital control over the purge mechanism. The 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 sensors 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 (KM 8001).

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



		KMPS-3-64							
INPUT	Pressure Ranges	0.07	0.14	0.35	0.7	1.7	3.5	7	17 BAR
		1	2	5	10	25	50	100	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	20 to 32 VDC							
DIGITAL OUTPUT	Maximum Current	300 mA + 2A For Heater							
	Insulation Resistance	100 Megohms @ 50 VDC							
	Interface	RS-485 or Ethernet							
	Resolution (Pressure)	24 Bits or 0.0015% F.S.							
ENVIRONMENTAL	Total Error Band (Pressure)	± 0.2% Typ. (± 0.5% Max.)		± 0.1% Typ. (± 0.25% Max.)					
	Conversion Rate	275 Samples/Sec/Channel							
	Baud Rate (RS-485)	RS485							
	Operating Temperature Range	-65°F to 255°F (-55°C to 125°C)							
PHYSICAL	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							
	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-ZOC-FB-040)								

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.