

kulite
PRESSURE SCANNER
KMPS-2-64-XX-Y SERIES

- High Accuracy Digital Compensation
- High Speed Digital Output (RS-485 or Ethernet)
- No External Heating or Cooling Needed
- Wide Temperature Range
 -65°F to +255°F (-55°C to +125°C)

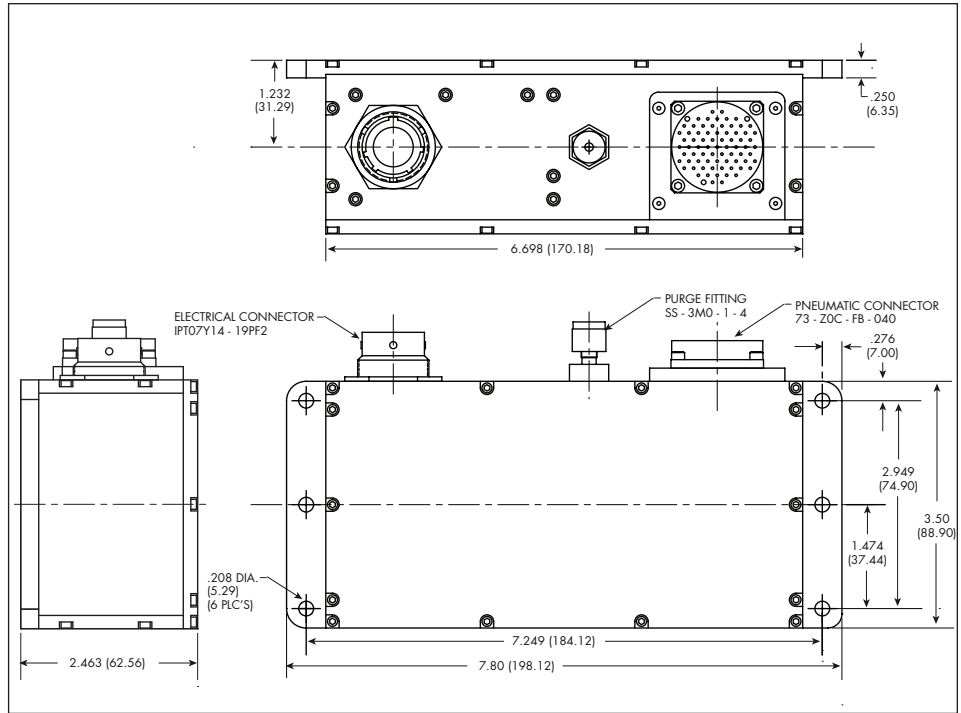
- Auto Zero
- Integral Purge
- IEEE-1588 Timing
- Silicon on Silicon
- Patented Design



The KMPS-2-64 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-2-64 is ideally suited for the flight 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 additional details see manual (KM 8001).



PIN DESIGNATIONS					
AIR PURGE & NO PURGE			MOTOR PURGE		
ETHERNET		RS485	ETHERNET		RS485
PIN	FUNCTION	FUNCTION	PIN	FUNCTION	FUNCTION
A	VIN +	VIN +	A	VIN +	VIN +
B	VIN -	VIN -	B	VIN -	VIN -
C	RX +	RS485A	C	RX +	RS485A
D	RX -	RS485B	D	RX -	RS485B
E	TX +	SPARE	E	TX +	SPARE
F	TX -	SPARE	F	TX -	SPARE
G	TRIGGER	TRIGGER	G	PURGE ACT	PURGE ACT
H	TRIGGER REF	TRIGGER REF	H	PURGE REF	PURGE REF
J	SPARE	SPARE	J	SPARE	SPARE
K	SPARE	SPARE	K	SPARE	SPARE
L	SPARE	SPARE	L	SPARE	SPARE
M	SPARE	SPARE	M	SPARE	SPARE
N	SPARE	SPARE	N	SPARE	SPARE
P	SPARE	SPARE	P	SPARE	SPARE
R	SPARE	SPARE	R	SPARE	SPARE
S	SPARE	SPARE	S	SPARE	SPARE
T	SPARE	SPARE	T	SPARE	SPARE
U	SPARE	SPARE	U	SPARE	SPARE
V	CASE GROUND	CASE GROUND	V	CASE GROUND	CASE GROUND

		KMPS-2-64								
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								
	Maximum Current	300 mA + 2A For Heater								
DIGITAL OUTPUT	Insulation Resistance	100 Megohms @ 50 VDC								
	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.)				
ENVIRONMENTAL	Conversion Rate	275 Samples/Sec/Channel								
	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	Reference Pressure	0-30 PSIA								
	Electrical Connection	19 Pin Circular Bayonette Connector (IPT07Y14-19PF2)								
	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. (M) 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.