



# PRESSURE SCANNER

## KMPS-2-64-XX-YY SERIES

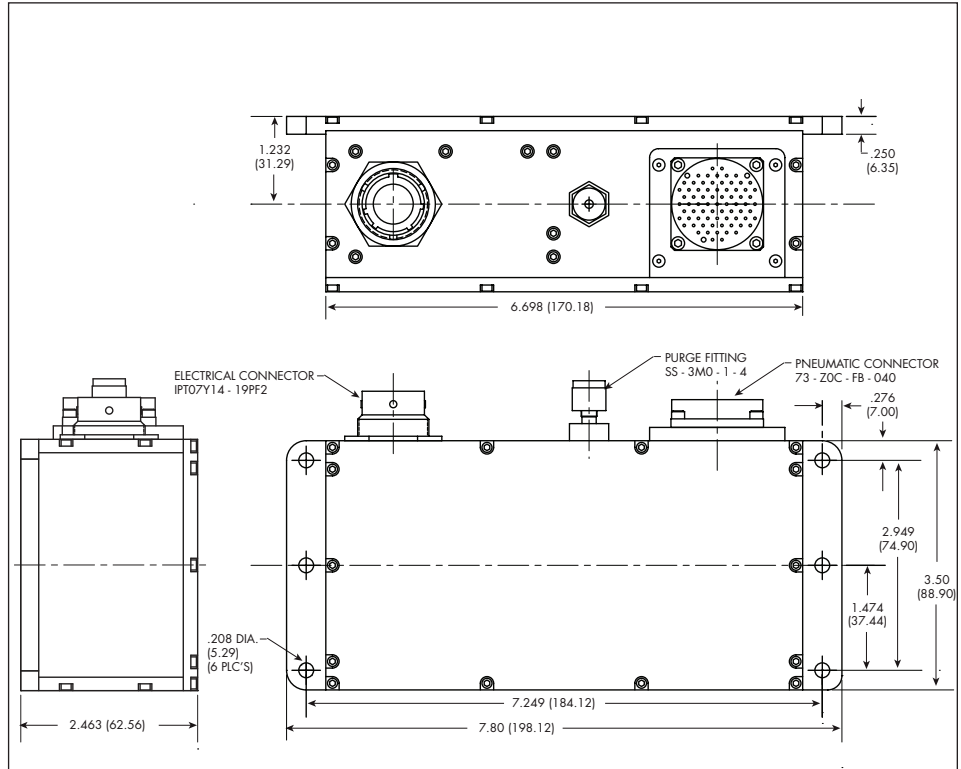
- High Accuracy Digital Compensation
- High Speed Digital Output (RS-485 or Ethernet)
- No External Heating or Cooling Needed
- Wide Temperature Range  
-65°F to +255°F (-55°C to +125°C)
- Auto Zero
- Integral Purge
- IEEE-1588 Timing
- Silicon on Silicon Integrated Sensor **VIS®**

**PATENT PENDING**



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.



PIN DESIGNATIONS					
AIR PURGE & NO PURGE			MOTOR PURGE		
PIN	ETHERNET FUNCTION	RS485 FUNCTION	PIN	ETHERNET FUNCTION	RS485 FUNCTION
1	VIN +	VIN +	1	VIN +	VIN +
2	VIN -	VIN -	2	VIN -	VIN -
3	RX +	RS485A	3	RX +	RS485A
4	RX -	RS485B	4	RX -	RS485B
5	TX +	SPARE	5	TX +	SPARE
6	TX -	SPARE	6	TX -	SPARE
7	TRIGGER	TRIGGER	7	PURGE ACT	PURGE ACT
8	TRIGGER REF	TRIGGER REF	8	PURGE REF	PURGE REF
9	SPARE	SPARE	9	SPARE	SPARE
10	SPARE	SPARE	10	SPARE	SPARE
11	SPARE	SPARE	11	SPARE	SPARE
12	SPARE	SPARE	12	SPARE	SPARE
13	SPARE	SPARE	13	SPARE	SPARE
14	SPARE	SPARE	14	SPARE	SPARE
15	SPARE	SPARE	15	SPARE	SPARE
16	SPARE	SPARE	16	SPARE	SPARE
17	SPARE	SPARE	17	SPARE	SPARE
18	SPARE	SPARE	18	SPARE	SPARE
19	CASE GROUND	CASE GROUND	19	CASE GROUND	CASE GROUND

<b>INPUT</b>	0.35 0.7 1.7 3.5 7 17 21 BAR
Pressure Ranges	5 10 25 50 100 250 300 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
<b>DIGITAL OUTPUT</b>	RS-485 or Ethernet
Interface	
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	9600 bps to 1.8 Mbps
<b>ENVIRONMENTAL</b>	
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
<b>PHYSICAL</b>	
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-Z0C-FB-040)

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal. (D)