



**PRESSURE SCANNER**  
KIPS-1-16

- 16 Channels in any Combination of Ranges/Modes
- Wide Temperature Range -40°F to 255°F (-40°C to 125°C)
- Single and Dual Channel Ethernet, RS-485 Outputs Available (CAN, USB, POE+ in Development)
- Simultaneous Sampling on all Channels
- DAQ and Calibration Software and LabVIEW® drivers provided
- Ethernet Communication Supports IEEE-1588 (PTP) and DDS

The KIPS-1-16 is a modular, flexible pressure scanner suitable for use as the primary steady-state and transient pressure measurement platform in a broad range of applications. Its industry-leading operating temperature and wide range of input pressures make it ideal for use in such diverse installations as gas turbines, wind tunnels, manufacturing and other test and industrial environments. With its robust design features, the KIPS-1-16 can be installed in close proximity to the measurement source leading to reduced installation costs and faster pressure settling times. It incorporates 16 individual replaceable sensors which can be customized for either gas or liquid measurements. The KIPS can also be supplied with a motorized or pneumatic purge system with valve position feedback transmitted over the communications network. The excellent long-term stability and minimal thermally-induced shifts of the mature Kulite sensing technology permit extended test periods without the need for frequent tares.



INPUT	Pressure Ranges*	1 to 1,500 PSI 0.07 to 100 BAR
	Operational Modes	Absolute, Gage, Sealed gage, Differential
	Proof Pressure	2 Times Full Scale (Min.)
	Burst Pressure	3 Times Full Scale (Min.)
	Rated Electrical Excitation	8 to 32 VDC
	Maximum Current	0.3 A (0.1 A Typ)
	Insulation Resistance	100 Megaohms @ 50 VDC
OUTPUT	Resolution	24 Bits
	Static Accuracy	± 0.05% FSO
	Total Error Band (including all thermal effects)	± 0.08% FSO Typ (0.15% FSO max) -20°F to 140°F (-30°C to 60°C) ± 0.1% FSO Typ (0.25% FSO max) -40°F to 255°F (-40°C to 125°C)
	Data Rate	14,000 Samples/sec/channel (16 channels)
	Effective Over Sampling	128 Times (min.)
	Down Sample/Filter Rates	5000,1000,500,100 Samples/sec
	Timing Accuracy	< 1 us
ENVIRONMENTAL	Operating Temperature	-40°F to 255°F (-40°C to 125°C)
	Compensated Temperature Range	-40°F to 255°F (-40°C to 125°C)
	Max Manifold Control Pressure	100 PSI for Operating Temperature > 0° F (-18°C) 175 PSI for Operating Temperature < 0° F (-18°C)
	Linear Vibration	20g Peak, Sine 10 to 2,000 Hz
PHYSICAL	Electrical Connector	15 Pin Circular Connector
	Weight	6.6 Lbs. (3 kg) (Approx.)
	Sensing Principle	Fully Active FourArm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon
	Pressure Ports	1/8" Female NPT (can be supplied with mating adaptors barbed fittings, bulged tubulation, Swagelok®, Gyrolok®)
	Enclosure	Dust and Moisture Resistant > 160 dB SPL acoustic pressure level
	Length	10.0 inches (250 mm)
	Height	4.0 inches (125 mm)
	Width	4 inches (90 mm)

\*All features are not available for all pressure ranges

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 © 2024 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.