PCB PIEZOTRONICS
AN AMPHENOL COMPANY

MODEL **920**

PORTABLE DIGITAL TRANSDUCER INSTRUMENT

- Simultaneous display of track and peak data
- Collects up to 300 time and date stamped readings
- Compatible with most conventional strain gage transducers
- Selectable units of measure and filters
- Calculated population and sample size statistics

TYPICAL APPLICATIONS

- Calibrate Hand Torque Wrenches Including “Click” Type Wrenches
- Setup and Test Assembly Tools
- Verify Power Tool Performance
- Perform Post-Assembly Torque Audits On Threaded Fasteners
- Troubleshoot & Analyze Bolted Joints
- Measure Fastener Clamp Load
- Monitor Press Force

MEASURE, MONITOR, TROUBLESHOOT

The RS Technologies product line Model 920 Portable Digital Transducer Instrument can be used with other RS Technologies’ products such as the Stationary Torque Tool Transducer, Rotary Torque Transducers, Force Washers, and more.

The instrument fits comfortably in your hand and is powerful and accurate enough to be used as a primary standard for auditing most torque applications in manufacturing and quality departments. When connected to a Rotary Torque Transducer, the unit can be used to test the capability of power tools, verify the accuracy of hand tools, monitor the capability of a fastening process, or audit the quality of an assembled joint. Model 920 can also be easily set up for use with force washers, clamp force sensors, and other transducers to measure fastener assembly preload, press force, pressure, and numerous other applications.

Model 920 can monitor and record data quickly, easily, and accurately. The alphanumeric display is easy to read and prompts you through setup and operation as needed. The unit displays track and peak torque or force simultaneously and measures in either the clockwise or counterclockwise (compression or tension) direction. Model 920 can also read the auto ID chip in RS Technologies’ transducers to simplify setup.

The built-in serial port allows for printing data and statistics right from the unit. The recorded data can also be uploaded to a personal computer for further analysis using the HyperTerminal application provided with Microsoft Windows®.

SPECIFICATIONS	
Performance	
A/D Resolution	16-bit
Accuracy	±0.500% FS Peak Mode, ±0.5% FS Track Mode
Angle Input	Quadrature, A/B Track
Angle Resolution	Transducer CPR Dependant
Bridge Excitation	5 VDC
Calibration	External Binding Posts
Communications Port	RS232 Serial for Printout or Upload to Computer via HyperTerminal
CW/CCW Operation	Software Selectable
Data Memory	Automatic Storage of 300 Peak Torque Angle or Force Readings, Scrolling Feature for Viewing Readings, Last Reading Deletable
Dimensions (L x W x H)	2.750 x 4.375 x 8.500 in (70 x 111 x 216 mm)
Display	LCD, 20 Alphanumeric Characters by 4 Lines with 5-digit Readout Plus 6-digits for Angle
Enclosure	High Impact Plastic with Shoulder Strap
Engineering Units	Software Selectable (lbf·ft, lbf·in, ozf·in, N·m, kg·cm, kg·m, lb, and N)
Frequency Response	Software Selectable Filter 500 and 1000 Hz or Off (3200 Hz)
Humidity	5 to 95% N.C.
Input Power	Nickel-Metal Hydride (NiMH) Battery, AC Battery Charger 115/220 VAC, Low Battery Charge Warning
Input Signal	Compatible with Conventional Strain Gage Transducer with Outputs Ranging from 0.8 to 5.0 mV/V and with High Level Devices up to ±5 VDC
Keypad	16-key Numeric and Special Function
Maximum Angle Count	10k Degrees
Operating Temperature	0 to +55 °C (+32 to +131 °F)
Options	Multiple Limit Sets
Printout	Transducer and Limits Data, Time and Date Stamped Peak Data, Angle at Peak (if Used), and Statistics
Recommended Recalibration	Yearly
Statistics	High, Low, Mean, Standard Deviation, ±3 Sigma, Cpk, and Cp; Calculations Based on Software Selectable Sample Size or Entire Population
Weight	1.5 lb (680.4 g)
Supplied Accessories	
Battery Charger, Shoulder Strap, Instruction Manual, Calibration Certificate	
Recommended Accessories	
Serial Communications Cable, Local Serial Printer	

Portable Digital Transducer Instrument with Optional Cable
(097000-34445)

Back Panel

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