



KTS-1000 Digital Precision Pressure Controller Monitor (DPPCM)

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Features:

- **RVSM Accuracy**
- **All Solid State Design** - Ensures consistent, dependable results time after time
- **Durable** - Designed especially for heavy use
- **Module of the Digital Air Data Test Set (DADTS)**
- **Exclusive Windows-based software** - Provides quick and easy operation using a notebook or desktop PC



General Information

As Kollsman's next generation to the highly successful Precision Pressure Controller Monitor (PPCM), the KTS-1000 has been designed to offer a full range of test capabilities with today's latest solid state performance, reliability and value.

The KTS-1000 is a fully automated, durable, Digital Precision Pressure Controller Monitor (DPPCM), ideal for continuous use in manufacturing, test or repair applications where external vacuum/pressure sources are available.

High Accuracy Solid State Design

The KTS-1000 provides exceptional accuracy, sufficient for Reduced Vertical Separation Minimum (RVSM) requirements. The unit incorporates highly accurate solid-state pressure transducers and proprietary designs for delivering accurate measurement of air data parameters.

Durability

The KTS-1000 was designed especially for high duty use. The KTS-1000 has been designed to meet MIL-PRF-28800F, Class 2 environmental requirements to provide for dependable operation in a variety of harsh climates. This durability makes the KTS-1000 an ideal choice for hanger or flightline applications where vacuum/pressure sources are readily available.

Programmability

At the heart of the KTS-1000 is Kollsman's Windows-based software designed to greatly improve ease of operation and reduce test time. This software allows the user to select between a variety of measurement units with all relevant parameters displayed in real time. Up to 10 profiles can be stored for testing a variety of aircraft.

Scripting and data logging allow the user to automate testing for a variety of aircraft with documented proof of test results.

Easy Operation

The KTS-1000 is easily operated using a notebook or desktop PC via RS-232 interface. Operating parameters are entered using the PC keypad, and functions are executed by pointing and clicking with the mouse.

Also available is a handheld remote control which weighs just 13 oz. The 16-line by 24-character display allows the user a continuous, non-restricted view of all the parameters under control on a single display.

The KTS-1000 also features built-in leak test with real-time display of leak rate, auto venting protection, and built-in timer.

Housing Design

The KTS-1000 features a benchtop case, and is easily installed in a standard 19-inch equipment rack. This makes it an ideal choice for use in a multi-function flightline or hanger test cart.



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PARAMETER	OPERATING RANGE	RESOLUTION	ACCURACY	STABILITY / REPEATABILITY	UNITS
Altitude	-10,000 to 99,900 feet	1 foot	±3 feet or ±0.035% from -2,000 to 50,000 feet: ± 7 feet at 30,000 feet ±27 feet at 60,000 feet	±1 foot or ±0.017% from -2,000 to 50,000 feet; increases linearly to 0.1% at 99,900 feet	Feet InHg Meters hPa PSI
Rate of Climb	3 to 50,000 feet / min	1 foot / min	Instantaneous: ±10 feet / min or ± 5% Average: ± 1%	±10 feet / min or ± 5%	Same as Altitude
Airspeed	0 to 1,000 knots	0.1 knots	20 knots: ±2.0 knots 50 knots: ±0.8 knot 550 knots: ±0.05 knot 1000 knots: ±0.02 knot	20 knots: ±1.0 knot 50 knots: ±0.4 knot 550 knots: ±0.02 knot 1000 knots: ±0.01 knot	Knots, km/hr, Mach InHg: Qc and Pt hPa: Qc and Pt PSI: Qc and Pt
Mach Airspeed	0.002 to 5.0	0.001 Mach	Summation of Pt and Ps	Summation of Pt and Ps	Mach
Airspeed Rate	10 to 800 knots / min	0.1 knots / min			Same as Airspeed
Engine Pressure Ratio (EPR)	0.01 to 10	0.001	0.003	0.003	

Environmental Performance	MIL-PRF-28800F Class 2
Temperature Range -	
Operating	-20° C to +50° C
Storage	-55° C to +85° C
Sealing	Weatherproof in operating mode
Ps and Pt Connections	Front: Color-coded, keyed, quick connect Rear: MS-33656-6, MS-33656-4
Static Load Range	250 cubic inches max
Pitot Load Range	100 cubic inches max
Power Requirements	85 to 265 VAC at 47 to 440 Hz
Calibration Cycle	12 month interval
Dimensions	17" wide x 18" deep x 7" high
Weight	30 lbs
Warranty	1 year
Accessories	Bench Case Self Test Hose Assembly Remote Control (Optional)

Automatic Units conversion for inputs	Yes
Settable lower limit for all inputs	Yes
Negative Qc Availability	Yes
Ability to Run Scripts	Yes (with PC or Laptop)
Data Logging ability	Yes (with PC or Laptop)
Built-in Clock/Timer for Leak Test	Yes
Unit Under Test Protection	Auto Venting (in event of power loss)
Operational Modes	Dual Control Ps Control Only Pt Control Only Dual Monitor Only External Leak Test Internal Leak Test Reset/Vent Self Test Engine Pressure Ratio (EPR)
Interface Protocol	RS-232 and IEEE-488 (GPIB)
Control Method	Handheld Remote Control PC or Laptop Interface
Modulation	Yes (with PC or laptop) Frequency Modulation: Variable Amplitude Modulation: Variable

Ordering Information: KTS-1000 Part Number 18910910000

Continuing product refinement occasionally requires specifications to change without notice

