ADTS 415F Flight Control Systems Test Set

ADTS 415F
p/n 0014388-001

Description

The ADTS 415F is a modern Air Data Test Set developed and manufactured by Custom Manufacturing & Engineering™ (CME™). This pitot static test set is a commercially available portable, military-qualified, flight line test set that is a modernized and enhanced performance design based upon the legacy GE® ADTS 405 series of test sets but has enhanced performance, human factors ergonomics. The ADTS 415F is a self-contained, portable unit with integral pressure/ vacuum supplies, housed in a single military standard enclosure and is ideal for calibration and simulation on the flight line. The ADTS 415F is a twin-channel Ps and Pt pressure control system used for the precision calibration/verification of aircraft pitot statics, compliant with user validation of airframe RVSM (reduced vertical separation minima) requirements.

Fully programmable for a wide range of fixed or rotary wing aircraft operating envelopes, the ADTS 415F enables vital flight instrumentation, such as altimeters, airspeed indicators, rate of climb indicators, Mach meters and air data computers to be accurately and rapidly tested. A remote control hand terminal enables the instrument to be easily controlled from the cockpit or flight deck by a single operator. The ADTS 415F is a rugged and maneuverable test set that evolved from years of development, test, and operational military experience gained with related products. The test set provides enhanced performance, maintainability, and operational ease of use. CME provides A2LA accredited, ISO 17025 Calibration services for these test sets and other pressure products.

Applications

ADTS 415F is new, yet proven flight line test set for the inspection and acceptance of pitot and static systems including altimeters, vertical velocity indicators, air speed indicators, and air data computer systems.

- Supports wide range of fixed or rotary-wing aircraft
- Largest Customer: USAF, Aircraft OEMs/MROs, FMS for F-15, F-16, A-10, C-17, C-5, C-130, U-2, and UH-1N, UH1H, HH-60G, TH-1H, UAS
- Off the shelf, modern, replacement for legacy TTU-205, ADTS 405, TS-4508/U, TS-4463/P test sets
- RVSM compatible for military aircraft
- Eliminates sustainment issues for organizations facing obsolescence issues with legacy test sets
- Support equipment/maintenance organizations
- Aircraft manufacturers, airlines, fleet owners

Key Features & Benefits

- High accuracy, RVSM compliant
- Manportable, ruggedized and maneuverable for flight line use
- Illuminated front panel and remote terminal
- Supports military and civil specifications
- Integral or remote pressure/vacuum supplies
- Fully programmable for aircraft type
- Protection for aircraft instruments
- Lid Mounted Switching Manifold option available

The remote control terminal is a rugged handheld unit that provides the operator with all the display and keypad facilities featured on the ADTS 415F front panel. Operation from the flight deck is then possible by a single operator. Two standard cables for the remote terminal are provided (i.e., 50 ft (15.2 m) and 20 ft (6 m)).

Custom Manufacturing & Engineering™ ♦ AS9100D with ISO 9001:2015 Registered ♦ A2LA ISO 17025 Accredited
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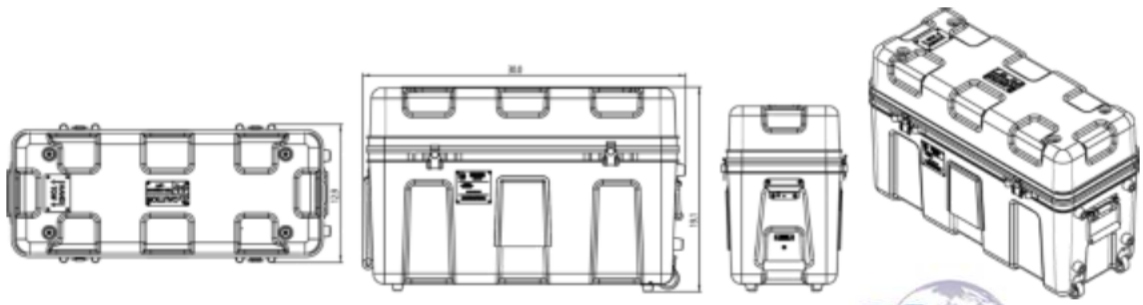
ADTS 415F Flight Control Systems Test Set

Specifications

Portability	Rugged case with handles, grasps, wheels for maneuverability and handling	
Weight **Dimensions**	Weight (Stowed Configuration) Height (with case cover closed) Width Length	82 pounds (37 Kg) 18 inches (457 mm) 12.9 inches (328 mm) 30 inches (762 mm)
Power Requirements	AC inputs Max Power Consumption	90-260 VAC 50/60 Hz, 103-127 VAC 400Hz 500 VA
Environmental	Operating Temperature Range Storage Temperature Range EMI/EMC Compliance Tested	-40 to 131°F (-40 to 55°C) -60 to 160°F (-51 to 71°C) MIL-STD-461F
Ranges		
Altitude	-1900 ft (-579m) to 80,000 ft (24,383m)	
Altitude, related pressure	32.03 to 0.8155 inHg	
Altitude slew rate	0 to 50,000 ft/min (+/-3 m/min) or +/-3%	
Airspeed, indicated	20 to 1,000 knots	
Airspeed, ind., related pressure	0.0192 inHg (0.487 mm) to 73.55 inHg (1868.17 mmHg)	
Airspeed slew rate	0 to 800 knots/min	
Mach limit setting	0 to 4.9 Mach	
Static load range	5 to 250 cubic inches (volume reduced at higher slew rates)	
Pitot load range	5 to 250 cubic inches (volume reduced at higher slew rates)	
Accuracies		
Altitude	±10 ft/min	
Altitude slew rate	(±3 m/min) or +/-3%	
Airspeed	±3 knots from 20-50 knots ±1.5 knots from 50-80 knots ±1 knot from 80-150 knots ±0.5 knots from 150-400 knots ± 0.2 knots from 400-1000 knots	
Airspeed slew rate	±2 knots/min or 3% setting (whichever is greater)	
Mach limit setting	± 0.05 Mach	
Digital Interfaces	IEEE488, RS232, Ethernet, and USB	
Pressure/Vacuum System	Integral pneumatic supplies. Auxiliary connections for external supplies to boost or drive other equipment. Supply for vacuum hold down static adaptors also provided.	
Remote Terminal	Complete with 20 ft (6 m) and 50 ft (15.2 m) long cables	
Technical Manuals, Accessories	Operator manual and calibration certificate also supplied as standard. Standard hoses, Quick Disconnect kit, power cables, and ground cables included. Additional cables and output hose styles are available, please inquire. Lid Mounted Switching Manifold available option with two 5-way manifolds for multiple outputs (Ps & Pt ports). Each line with an individual manual shut-off valve.	



AS9100D with ISO 9001:2015 Registration
ISO/TS 16949 Conformance

ACCREDITED
CERTIFICATE #4081.01