



# ADTS 415F FLIGHT CONTROL SYSTEMS TEST SET



**ADTS 415F**  
p/n 0014388-001

## DESCRIPTION

The ADTS 415F is a new Air Data Test Set being produced by Custom Manufacturing & Engineering™ (CME™) that is based on a series of reliable, high accuracy, air data test systems. CME's modernized ADTS 415F design is a modernized new system based upon the legacy of the GE® ADTS 405 series of test sets. The ADTS 415F flight line unit 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. This rugged, maneuverable, and portable design has evolved from years of development, test, and operational military experience gained with related products. The focus is on satisfying user requirements that have emerged over the last decade. The ADTS 415F test set provides enhanced performance, maintainability, and operational ease of use.

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.

## APPLICATIONS

The new ADTS 415F and the legacy ADTS 405 test set series, are proven, world class product leaders in the aerospace industry as well as a "standard" ADTS. The product has been specified and used by many organizations:

- Off the shelf, modern replacement for (and better than) legacy TS4508/U and TTU-205 test sets
- RVSM compatible for Military aircraft
- Support equipment/maintenance organizations
- National and international civil airlines
- Aircraft manufacturers
- Corporate fleet owners

## KEY FEATURES & BENEFITS

- Manportable, ruggedized and maneuverable for flight line use
- High accuracy, RVSM compliant
- 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

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)).

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## SPECIFICATIONS

<b>Portability</b>	Rugged case with handles, grasps, wheels for maneuverability and handling	
<b>Weight</b>	Weight (Stowed Configuration)	82 pounds (37 Kg)
<b>Dimensions</b>	Height (with case cover closed)	18 inches (457 mm)
	Width	12.9 inches (328 mm)
	Length	30 inches (762 mm)
<b>Power Requirements</b>	AC inputs Max Power Consumption	90-260 VAC 50/60 Hz, 103-127 VAC 400Hz 500 VA
<b>Environmental</b>	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
<b>Ranges</b>		
Altitude	-1900 ft = -579m; and 80,000 ft = 24,383m	
Altitude, related pressure	32.03 to 0.8155 inHg	
Altitude slew rate	(+/-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)	
<b>Accuracies</b>		
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	
<b>Digital Interfaces</b>	IEEE488, RS232, Ethernet, and USB	
<b>Pressure/Vacuum System</b>	Integral pneumatic supplies. Auxiliary connections for external supplies to boost or drive other equipment. Supply for vacuum hold down static adaptors also provided.	
<b>Remote Terminal</b>	Complete with 20 ft (6 m) and 50 ft (15.2 m) long cables	
<b>Technical Manuals, Accessories</b>	Operator manual and calibration certificate also supplied as standard. Standard hoses, power cables, and ground cables included. Additional cables and output hose styles are available, please inquire.	

