

# Avionics

## IRIS<sup>®</sup> 2000 AUTOMATIC TEST EQUIPMENT SYSTEM

**AEROFLEX**  
A passion for performance.



IRIS<sup>®</sup> 2000 systems in operation with major airlines around the world have proven to be highly reliable, even when used in standard shop environments for more than one shift.

The Aeroflex IRIS<sup>®</sup> 2000 is a modular general purpose Automatic Test Equipment (ATE) system capable of testing a wide variety of avionics Line Replaceable Units (LRU). The IRIS<sup>®</sup> 2000 is the only ATE that combines the testing of RF, analog and digital LRU's in one ATE system.

The basic configuration of this station consists of two or three equipment towers containing measurement and stimulus resources. Two wing cabinets provide additional work surface area, storage space for cables and accessories, and additional room for measurement and stimulus resources. The system layout gives easy and convenient access to all equipment during use as well as for maintenance. In addition, space is available for specific LRU hardware and other future expansions.

The ATE design incorporates current state-of-the-art commercial off-the-shelf resources as well as Aeroflex designed equipment and software. This promotes industry standard compatibility and simple equipment maintenance. The avionics LRU to be tested is connected to a Test Unit Adapter (TUA), which in turn connects to the front of the IRIS<sup>®</sup> 2000 ATE at the Programmable Interface Unit. The modular design makes it very easy to expand the system with additional measurement and stimulus resources required to test future avionics and/or adapt the IRIS<sup>®</sup> 2000 system to test avionics installed in new aircraft.

The test software development process is in accordance with ARINC 625-1 specifications.

### **THOR<sup>™</sup> Test Executive**

THOR<sup>™</sup>, the Aeroflex test software development and operating environment, is a powerful Windows NT<sup>™</sup> and LabWindows<sup>®</sup> CVI based graphical user interface (GUI) developed to add features for ease of use by programmers and operators alike. Its point and click feature allows for ease of LRU testing, intuitive test control usage, and datalogging for identification and tracking of rogue units.

## **GENERAL SPECIFICATIONS**

### **The basic IRIS<sup>®</sup> 2000 ATE system includes**

*Pentium<sup>®</sup> class PC*

*PIU Switching system*

### **AC/DC Power supplies**

*Signal generators*

*Data Interface Devices*

*Measurement Devices*

*Spares Kit*

*Installation*

*Training*

*Documentation*

### **Available Expansions**

*Digital Expansion*

*ADF Expansion*

*HF Expansion*

*Low Range Altimeter Expansion*

*Mode-S Expansion*

For the very latest specifications visit [www.aeroflex.com](http://www.aeroflex.com)

TCAS Expansion  
Air Data Expansion  
GPS Expansion

#### **THOR troubleshooting and debugging features**

Test Sequence Editor  
Alternate Test Sequence  
Test Pre-conditions  
Full/Partial Tests  
Loop On Tests  
Pause On Test Failure  
Report to screen  
Report To File  
Debug

#### **Every Test Program Set (TPS) includes**

Test Program  
Test Unit Adapter  
Test Unit Adapter Self-test (if required)  
Documentation

#### **Test Program Sets**

IRIS® 2000 capability list available upon request

## **ATE SPECIFICATIONS AND ENVIRONMENT**

### **SHOP POWER REQUIREMENTS**

#### **AC Input Single Phase**

115V +10% or 220V +10%

#### **AC Frequency**

50 Hz to 60 Hz

#### **Power Consumption**

Varies per configuration, 1.8 KVA typical

#### **Ground**

Isolated ground must be provided

### **LINE CURRENT REQUIREMENTS (BASE SYSTEM)**

20 Amps maximum for 115V  
10 Amps maximum for 220V

### **ENVIRONMENTAL REQUIREMENTS**

#### **Ambient Temperature**

59° - 71° F, 15° - 25° C

#### **Ambient Humidity**

20% - 80% non-condensing

### **SHOP AREA REQUIREMENT FOR 2-BAY IRIS® 2000**

#### **Length**

197 inches, 480 cm

#### **Width**

144 inches, 360 cm

#### **Height**

96 inches, 210 cm

#### **Weight**

2400 lbs, 1100 kg (fully configured)

### **ROOM CONFIGURATION**

- The ATE room or shop area must have at least two conveniently located power outlets.
- Shelving for storage of the ATE test unit adapters, accessories and manuals is desirable.
- Sufficient floor space to allow the operator to move comfortably around the entire system is required.
- Standard room lighting and ventilation is sufficient for normal operations.

**CHINA Beijing**  
Tel: [+86] (10) 6467 2761 2716  
Fax: [+86] (10) 6467 2821

**CHINA Shanghai**  
Tel: [+86] (21) 6282 8001  
Fax: [+86] (21) 62828 8002

**FINLAND**  
Tel: [+358] (9) 2709 5541  
Fax: [+358] (9) 804 2441

**FRANCE**  
Tel: [+33] 1 60 79 96 00  
Fax: [+33] 1 60 77 69 22

**GERMANY**  
Tel: [+49] 8131 2926-0  
Fax: [+49] 8131 2926-130

**HONG KONG**  
Tel: [+852] 2832 7988  
Fax: [+852] 2834 5364

**INDIA**  
Tel: [+91] 80 5115 4501  
Fax: [+91] 80 5115 4502

**KOREA**  
Tel: [+82] (2) 3424 2719  
Fax: [+82] (2) 3424 8620

**SCANDINAVIA**  
Tel: [+45] 9614 0045  
Fax: [+45] 9614 0047

**SPAIN**  
Tel: [+34] (91) 640 11 34  
Fax: [+34] (91) 640 06 40

**UK Burnham**  
Tel: [+44] (0) 1628 604455  
Fax: [+44] (0) 1628 662017

**UK Stevenage**  
Tel: [+44] (0) 1438 742200  
Fax: [+44] (0) 1438 727601  
Freephone: 0800 282388

**USA Wichita**  
Tel: [+1] (316) 522 4981  
Fax: [+1] (316) 522 1360  
Toll Free: 800 835 2352

**USA New Century**  
Tel: [+1] (913) 764 2452  
Fax: [+1] (913) 782 5104

As we are always seeking to improve our products, the information in this document gives only a general indication of the product capacity, performance and suitability, none of which shall form part of any contract. We reserve the right to make design changes without notice. All trademarks are acknowledged. Parent company Aeroflex, Inc. ©Aeroflex 2006.

[www.aeroflex.com](http://www.aeroflex.com)  
[info-test@eroflex.com](mailto:info-test@eroflex.com)



Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.