



*THE NEXT
GENERATION IN
POWER CONTROL
A.T.E.*

*Next **G** en*

TS-1650C



featuring

**DIGITAL POWER
TECHNOLOGY**



A Licensee and Teaming Partner of
Hamilton Sundstrand
A United Technologies Company

NextGen TS-1650 APPLICATION

Testek's NextGen TS-1650 provides economical and high speed, certified correct testing of a wide range of aircraft avionics and control components. The TS-1650 is a family of universal, automatic test systems, one of which is best for your application.

The TS-1650 can test all aircraft electrical system controls (GCU, BCU, BPCU, ELCU, VR, etc.) for most aircraft types. This includes airliners, commuter aircraft, military transport and tactical aircraft, helicopters, and VTOL craft. The TS-1650 is also well equipped to test avionics such as PSEU, ASCU, ELMS, audio, and other "black boxes" within its frequency and power range.

Most popular aircraft components already have interface adapters and test programs perfected and in service. The new TS-1650 is the fourth design modernization of a test system which has evolved over the past twenty years. Today's NextGen TS-1650 is completely redesigned to utilize state-of-the-art hardware such as Digital Power Technology sources, low distortion programmable oscillators, long term accurate digital metering, and Windows 98 software.

"If you are buying a test system with old design analog power supplies, you are buying outdated technology."



AIRBUS	A300, A310, A319, A320, A321, A330, A340
BOEING	707, 717, 727, 737-100 TO -800, 747 CLASSIC, 747-400, 757, 767, 767-400, 777
FOKKER	F27, F28, F50, F70, F100
LOCKHEED	L-1011
MCDONNELL DOUGLAS	DC-9, DC-10, MD-11, MD-80, MD-90
OTHER	ATR-42, ATR-72, G-V, GLOBAL-EXPRESS
MILITARY TRANSPORT	C-130, C-141, C-17, C-5, KC-135, KC-10
MILITARY TACTICAL	F4E, F-15, F-16, F-18, F-22, AV8B, A6F, Harrier, many helicopters, V-22
MILITARY LONG RANGE	B-1B, B-2, B-52H, E3A, E4A, B, E6A, AWACS, 767 AWACS

Aircraft electric power systems covered by Hamilton Sundstrand-Testek Team Partnership in BLUE

THE *NextGen* TS-1650 IS ECONOMICAL

Quality test equipment is not inexpensive. Testek quality, reliability, and good support have their cost. However, Testek understands that your shop must be very economical in your choice of test solutions - especially A.T.E.

The NextGen TS-1650 has been completely redesigned to take advantage of every possible economy which does not reduce quality, reliability, and long term supportability of the test system.

NAME BRAND, COMMERCIAL-OFF-THE-SHELF COMPONENTS

Inside the NextGen TS-1650, you will find such well known names as Hewlett Packard and California Instruments. Testek utilizes unmodified instruments and power supplies in the TS-1650, allowing world-wide support of our systems for decades into the future.

For many reasons, the test equipment business is moving away from customized, "proprietary" instruments and power supplies. Testek has always advocated the use of commercial-off-the-shelf components. Today, the advanced accuracy of digital technology AC and DC power sources has revolutionized Testek's NextGen TS-1650 A.T.E.

NextGen means STATE-OF-THE-ART

There have been several advances in test technology in the last two or three years that have resulted in higher accuracy at lower cost. If your proposed A.T.E. doesn't take advantage of these advances, you are probably buying obsolete technology.

DIGITAL POWER TECHNOLOGY RESOURCES

The NextGen TS-1650 replaces outdated analog power supplies with Digital Power Technology. Analog power supplies are less accurate, costlier, less reliable, and much more power-hungry than the new digital power supplies. Testek tested our ATE extensively with Digital Power Technology before applying this new class of power supplies to the NextGen TS-1650.

In General, Digital Power Technology test resources provide:

- Four times the reliability
- Half of the weight and size
- Double the accuracy
- Twice the efficiency
- Half of the waste heat
- And TWICE the power per dollar

over the old, analog technology. If you are buying a test system with old design analog power supplies, you are buying outdated technology.

The analog Long Playing record was the best we had in the 1970s. Today's Digital Compact Disc has completely replaced the LP record. So it is with Digital Power Technology versus old style analog power sources. Digital Power works better, costs less, and lasts longer

**DIGITAL POWER
TECHNOLOGY**



APPROVED, ACCURATE, COMPLETE AUTOMATIC TESTING

The most important page of every NextGen TS-1650 operator manual is the FIRST PAGE. This contains the Approval that the TS-1650 and its adapters and test programs fully satisfy the requirements of the Component Maintenance Manual (CMM).

In the case of Hamilton Sundstrand components, Hamilton Sundstrand approves and recommends the TS-1650 system. Hamilton Sundstrand also lists the TS-1650 in most of their CMMs as the approved and recommended test equipment for this class of components.

WHY DOES HAMILTON SUNDSTRAND APPROVE AND RECOMMEND THE TS-1650?

Testek and Hamilton Sundstrand have a License and Teaming Partnership Agreement to provide trustworthy, approved and proven test equipment for Hamilton Sundstrand electrical power generating system controls. In most cases, Testek develops the test programs and adapters in advance of the aircraft fleet introduction under contract to Hamilton Sundstrand, assuring the airlines of a test equipment solution. Testek is the sole Licensee and Teaming Partner of Hamilton Sundstrand, and no other test equipment manufacturer offers this license and teaming partnership for the Hamilton Sundstrand line of aircraft electrical control products. Hamilton Sundstrand knows that Testek has been providing consistently successful test systems for over 30 years to the aviation industry and met the criteria for a license and Teaming Partnership.

Testek works closely with Hamilton Sundstrand engineers to assure the best possible solution for avionics shops. By the Hamilton Sundstrand-Testek License and Teaming Partnership, the two Companies have a relationship whereby all of the information needed to provide a complete, accurate test solution is available to Testek.

By selecting Testek's NextGen TS-1650 solution, you are assured of an accurate, approved, complete test solution.

Testek, NextGen, TS-1650 and Digital Power Technology are trademarks of Testek, Inc. Windows 98 is a trademark of Microsoft, Inc. Hewlett Packard and California Instruments are trademarks of their respective companies. Features and specifications are subject to change without notice.



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Two **NextGen** TS-1650 Models To Choose From

Testek now offers the same TS-1650 in two useful packages:



The compact NextGen TS-1650C takes advantage of the much smaller and lighter digital power technology resources to provide a very compact, attractive ATE for avionic shop and office environments. A side table provides useful work space for the operator and holds the display(s), keyboard, mouse, printer and working documents at the right height for long term use. The compact TS-1650C contains all of the identical test resources of its larger brother (the TS-1650S), but packages everything in a compact, sturdy cabinet. Many ATE shops are already crowded with test equipment; these shops can make best use of the TS-1650C, even substituting existing bench space for the side table

The NextGen TS-1650C is our compact model -ideal for modern avionics shops.

The full size NextGen TS-1650S provides the same digital technology power sources and computer power in a larger, fully integrated test facility which is best for production floor and factory environments. The TS1650S provides full sized cabinet space for all essential ATE components, displays, keyboard and printer. A tabletop at the front of the machine provides operator convenience and holds the test unit.



The Choice Is Yours

Both TS-1650 models are ruggedly built and designed for continuous, high speed testing. The difference is in the floor space requirements and cabinet styling. Either choice is an economical solution for your application.

The full size TS-1650S features enclosed displays, printer, etc. – ideal for production and factory floor use.



Testek was formed over thirty years ago (1969) by several engineers and managers of the Cox Instrument Company. Because of their background in flow instrumentation, Testek's initial products were in the discipline of fuel flow measurement and control. An early (and long term) customer was Pratt and Whitney, which today remains a loyal customer for a wide variety of special and production test stands.

Testek produced its first electrical test stand about twenty-two years ago. Subsequently, that universal test stand design has been revised and continually updated so that, today, it is the best selling IDG test stand, highly respected

for its elegant simplicity, easy support, and operator friendliness. In 1995, Testek was selected as Team Partner of Hamilton Sundstrand Aerospace, largely because of its willingness to work with Hamilton Sundstrand in furthering both Companies' interests. At that time, Testek became the licensed manufacturer of the Hamilton Sundstrand-Testek TS-1650 Automatic Test Equipment for aircraft electric power control.

Today, test equipment is virtually Testek's only product, with aircraft electrical generating components and controls as our best products. Testek continues to be widely known for its engineering excellence, integrity, quality, on-time delivery, and efficient, friendly support of its customers, worldwide. Most customers come to Testek by "word of mouth" recommendation by happy customers.

Products and Services

Testek specializes in test stands, automatic test equipment, and GSE for use by airlines, OEMs, repair stations, airframe manufacturers, and military branches, worldwide. Tested components include:

- Electrical generating system components, IDG, CSD, generator, VSCF, etc.
- Electrical generating system controls, GCU, BCU, BPCU, EPCU, etc.
- CSD/IDG governor
- Hydraulic servo valves, actuators, pumps, motors, servo-actuators, etc.
- Pneumatic valves, actuators, controls, air cycle machines, etc.
- Fuel pumps, boost pumps, controls, mass flow meters, flow transducers, transfer pumps, HMUs, etc.
- Lubrication pumps, coolers, controls, etc.
- Special development test stands for all of the above types of system integration, "iron birds", certification mockups, etc.

Service and Support

Testek fully supports its products with reliable world-wide service and spare parts. From our Livonia, Michigan USA factory, we dispatch our engineers to points around the world - Europe, Africa, Eastern Europe, Southeast Asia, China, the Far East, the South Pacific, South, Central, and North America. Testek is a world class Company with experience trading in many other countries.

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