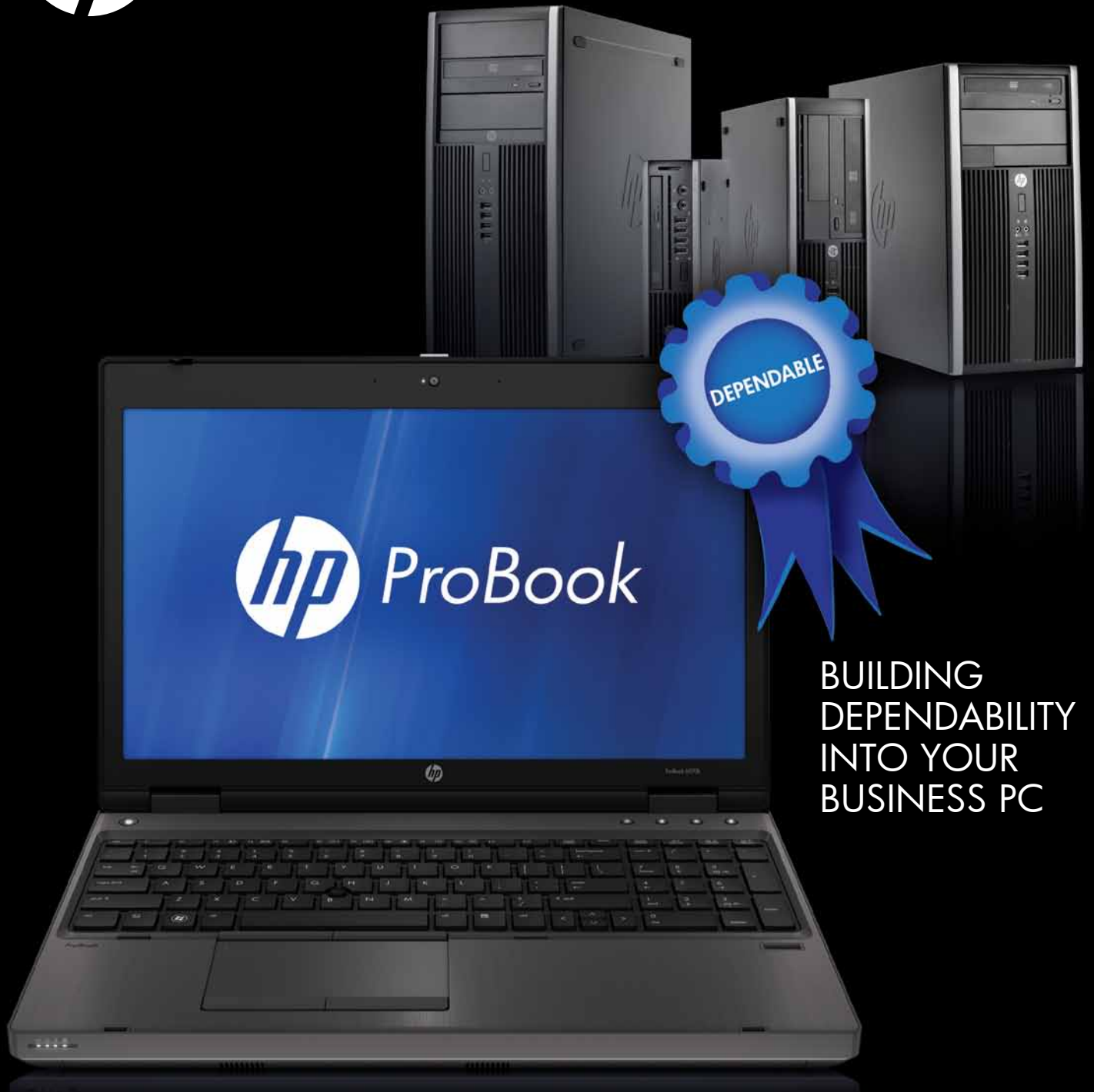




TOTAL TEST PROCESS



BUILDING
DEPENDABILITY
INTO YOUR
BUSINESS PC

TECHNOLOGY SPOTLIGHT

HP PROFESSIONAL INNOVATIONS FOR BUSINESS DESKTOPS AND NOTEBOOK PCS

GET A BUSINESS PC THAT'S BUILT TO GO THE DISTANCE.

For busy professionals, a reliable computing system is key to getting things done. Whether you're in the office or on the road, your productivity depends on the availability and performance of your PC.

When your PC experiences a component failure or breaks from the wear and tear of travel, your workday can come to a halt. Chances are, you can't accomplish much without access to the data on your hard drive, including contact information, documents, spreadsheets and presentations.

HP understands what's on the line when it comes to a business PC. That's why we go to extreme measures to build high reliability into every HP Business Desktop and Notebook PC. This reliability is the result of a multi-tiered product validation process that includes comprehensive, end-to-end diagnostics and a minimum of 113,000 hours of testing per computing platform.

This HP Total Test Process is designed to bring you reliable, durable business PCs that are built to go the distance under a wide range of operating conditions.

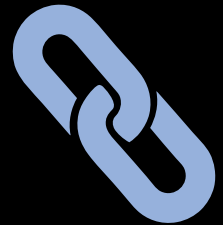
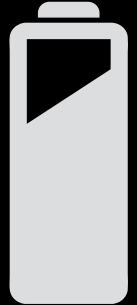
DRIVING HIGHER STANDARDS WITH A TOTAL TEST PROCESS

The HP Total Test Process is an outgrowth of the longstanding HP commitment to quality. Through this exhaustive lifecycle testing process, we validate product quality and identify opportunities to build higher levels of reliability and durability into every HP Business Desktop and Notebook PC.

We stress our business PCs and the components in them far more than typical usage scenarios. We put our computers through tests for vibration, dust, humidity, altitude and high temperature.

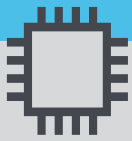
Our comprehensive and proven testing program delivers superior quality and reliability. The remarkable 113,000 hours of testing per platform even tests industry-standard hardware and software products for compatibility.

The basic premise for the HP Total Test Process lies in building a solid, more reliable business desktop or notebook PC—and a better tool for your business. Our Total Test Process helps ensure that our PCs can stand up to the rigors of your work environment.



PUTTING HP BUSINESS PCS TO THE TEST

The HP Total Test Process encompasses tests across a wide range of measures. These include tests that stress system components, notebook lids and displays, keyboards, optical drives, hard drives, and electrical features. We also subject our business PCs to drop and shock testing, thermal and vibration testing, system integration testing, and more. Consider the following examples of our Total Test Process.



System components

Our test professionals exert an immense amount of stress on processors, host bus, memory subsystem, chipset and peripherals.

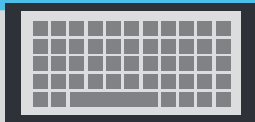
These exercises verify the standard third-party devices on systems using the operating system's or vendor's drivers. By using custom peripheral test cards and drivers, the test also confirms that other bus transactions occur correctly. The benefit to our customers is enhanced overall notebook reliability to help reduce system issues, downtime, failures and repairs.



Notebook lids and displays

In HP Business Notebook PCs, we apply rigorous testing procedures to all aspects of the display assembly, including hinges, clutches, latches, the enclosure and scratch-resistant surfaces.

To make sure HP Business Notebooks are ready for the challenges of daily wear and tear, we employ mechanical tests to simulate opening and closing the notebook 10 times every day for six years or 25,000 cycles. To deliver more durable display panels, we use scuff testing to help ensure display surface hardness and scratch resistance.



Keyboards

To make sure your HP keyboard is ready for the demands you place on it, we employ mechanical

tests to simulate seven years of keyboard usage or to validate mechanical, electrical and cosmetic properties. That's an amazing 20 million keystrokes on our business keyboards.



Batteries

To stay productive, business travelers rely on dependable batteries on their notebooks. They also have high expectations for ever-increasing battery runtimes to take them through their workdays. To deliver on these expectations, we put our notebook batteries through extensive quality testing.

Battery cells are first tested individually, then tested again after they are assembled into battery packs and then re-tested with the batteries placed in-system. Cells are charged at different rates and under different environmental conditions. The process can take up to a year before they meet HP standards.



Environmental testing

Notebook PCs are subject to the rigors and environmental conditions that come with security checkpoints, overhead luggage compartments and frequent exposure to

outdoor climates. Desktop PCs might be put into service on open-air shipping and receiving docks, construction trailers and manufacturing floors filled with vibrating machinery.

To make sure our business PCs are ready for these challenges, we subject our products to extreme temperature and humidity conditions, simulating operation in harsh environments. For example, we test the fans in HP Business Desktops in temperatures exceeding 150 degrees Fahrenheit (65.6 degrees Celsius).

At the system level, HP tests our PCs under extreme thermal and vibration conditions. These tests give us insights that help us build high levels of reliability into every HP Business Desktop and Notebook PC. While not embraced by all manufacturers in the industry, HP remains committed to completing this type of testing to deliver a more reliable notebook.



Optical drives

We subject HP Business Desktop PCs to tests that repeatedly eject and retract motorized optical drives for 15,000 ODD open and close cycles to help ensure their reliability. We're that detailed to help ensure your business PCs last.

INCREASE YOUR CONFIDENCE WITH AN HP BUSINESS PC.

The HP Total Test Process helps ensure that HP Business Desktop and Notebook PCs can stand up to rigorous work environments. These tests lead to ongoing design innovations that increase the dependability of HP Business PCs.

For example, a chemically strengthened glass touchpad in HP EliteBook Notebook PC models increases the product's durability, while the hinges are made from a solid piece of high-strength precision-formed aluminum alloy to improve strength and longevity.

Innovations like these help us deliver better reliability, which is key to less downtime and a lower cost of ownership. Our rigorous testing standards help ensure that your PC can perform under a variety of conditions, so you can devote more attention and resources to your business.

Whatever your environment, HP Business Desktop and Notebook PCs are ready for the challenges.

LEVERAGE THE POWER OF HP PROFESSIONAL INNOVATIONS.

Knowledge gained through the HP Total Test Process leads to many innovations that allow HP Business Desktop and Notebook PCs to deliver an enhanced computing experience. HP Business PCs incorporate an array of hardware features for enhanced reliability and software solutions for improved security, seamless connectivity solutions and optimal efficiency.

In short, HP Professional Innovations help keep you more productive wherever business takes you.

To learn more, visit www.hp.com/go/professionalinnovations.

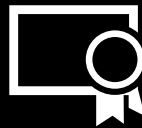
LOOK FOR THESE INNOVATIONS ON HP BUSINESS NOTEBOOKS.



SECURITY



EASE OF USE



RELIABILITY



ENVIRONMENTAL

—
TOTAL TEST PROCESS

