Toughpad FZ-N1 Certifications

MIL-STD-810G

The Toughpad® FZ-N1 is MIL-STD-810G certified for a range of extreme conditions including 48" drops[1], shocks, vibration, humidity, altitude, explosive atmosphere, rain-, dust- and sand-resistance, temperature extremes and thermal shock. Each of the twenty-one MIL-STD-810G tests conducted have been certified by independent lab testing. MIL-STD-810G, which was created in October 2008, supersedes MIL-STD-810F. **DOWNLOAD MIL-STD-810G REPORT**

Ingress Protection (IP68) (IP66)

The Toughpad® FZ-N1 is IP68 certified[1] and IP66 certified according to the IP code defined in the international standard IEC 60529. The products are tested and certified by an independent test lab facility located in the United States. Rather than vaguely describing equipment as "waterproof" or "dustproof", the IP Code uniformly quantifies various levels of resistance to liquids, particulates and solid objects. The numbers following the letters "IP" represent the specific degree of protection provided by electrical enclosures. The first digit (6) indicates the ingress of dust at a level that will not have a harmful effect on the operation of the unit. The second digit (8) indicates that immersion in water beyond 1 meter (exact conditions vary by each computer manufacturer) will not compromise the computer's functioning. Higher numbers indicate a higher tolerance to dust and water. For example, a unit with an IP65 rating will withstand both elements better than a unit with an IP54 rating. While IP68-certified Toughbook computers are not completely impervious to the ingress of water or dust, the rating does indicate neither element will cause operational complications while used under conditions commonly encountered by Panasonic ultra-rugged computers. **DOWNLOAD IP68 REPORT**

ISO Certification

Since 1996, all Panasonic manufacturing plants worldwide—including the factory in Kobe, Japan—have achieved ISO 14001 registration and implemented the ISO 14001 Environmental Management System. The Kobe factory has also been certified for ISO 9001, an international standard for quality management systems that enhance product quality assurance and customer satisfaction.

International Organization for Standardization (ISO) is an international federation promoting the development of international manufacturing, trade, and communication standards. ISO 14000, a series of standards, provides the framework for managing the environmental impacts of an organization. The ISO 14001 international standard established a systematic approach that organizations can use to minimize or prevent environmental impacts and risks. This approach, known as an Environmental Management System or EMS, requires the organization to establish an environmental control policy, educate employees about procedures and continually monitor environmental performance.

RoHS Compliance

For manufacturers of electronic equipment, the main impact of RoHS is that only lead-free products can be sold in Europe. Panasonic has therefore shifted to lead-free solder. By selling RoHS-compliant products in all countries, not just Europe, Panasonic helps eliminate hazardous electronic waste materials from landfills and waste dumps around the world. **READ MORE**

Verizon

Verizon Wireless delivers high-speed wireless access in 259 major metro areas, covering more than 280 million people. Panasonic Toughbook computers connect to the Verizon Wireless network without the need of a PC card or Wi-Fi hotspot. **READ MORE**

AT&T

A United States wireless leader, AT&T has more than 72.9 million subscribers and offers the best coverage of any carrier worldwide[1]. Panasonic Toughbook mobile computers are designed with embedded wireless technology allowing instant access to AT&T's extensive high-speed network without the need for an external card, additional antenna or other accessories. **READ MORE**

[1] Tested by national independent third party lab following MIL-STD-810G Method 516.6 Procedure IV for transit drop test and IEC 60529 Sections 13.4, 13.6.2, 14.2.5 and 14.3 for IP65.