



PANASONIC TOUGHPAD COMPETITIVE COMPARISON CHART

CONSUMER-GRADE		Panasonic Toughpad® A1	Motorola Xoom™	Samsung Galaxy Tab™	RIM BlackBerry® PlayBook™	Apple iPad™ 2	Panasonic Advantage
RUGGED FEATURES							
Magnesium Alloy Chassis		X					The Toughpad A1 is built with a magnesium alloy chassis providing superior strength and resistance to corrosion.
Elastomer Bumpers		X					
LCD Mounting Protection		Protected Glass and Touchscreen	Protected Glass Only	Protected Glass Only			The Toughpad A1's enclosure protects the multipart system to ensure all components stay functional, while Lenovo and Motorola only have Corning® Gorilla® Glass which protects the layer of glass.
Screen Protector		X					Protective film reduces the expense and downtime of having to replace worn LCDs.
Covered Ports		X					Port covers enable superior ingress protection from dust and water.
Ruggedized Vehicle Mounting		X					The Toughpad tablet and the docking station are designed to withstand extreme vibrations of a moving vehicle.
Commercial-Grade Accessories		X					Accessories designed to survive and protect in extreme user environments.
MIL-STD-810G	Ingress Protection	IP65					A higher rating ensures reliability and increased productivity in a wider range of operating conditions.
	Drop Test Rating	4 feet					The Toughpad A1 can withstand multiple drops for reliability in rugged conditions.
	Operating Temperatures	14°F to 122°F				32° F to 95° F	The Toughpad A1 can be used in a wider range of operating conditions.
	Vibration	X					Tested to meet MIL-STD-810G standards beyond vehicle vibration by also testing for use in helicopters.
	Dust	X					The covered ports of the Toughpad A1 help to pass the MIL-STD-810G test for dust and debris.
	Max Operating Altitude	15,000 feet					The highest road in the continental US is 14,120 feet (Mount Evans, CO).
	Temperature/Thermal Shock	X					The Toughpad A1 is designed to survive a wide swing in temperatures that can produce thermal shock. Panasonic tests three cycles from 200°F to -60°F.
	Independent Lab Certified	X					An independent nationally recognized lab has verified the Toughpad A1 tablet has met all of the above MIL-STD-810G tests. This report can be downloaded from the Toughpad tablet website.
Standard Warranty		3 Years	1 Year	1 Year	1 Year	1 Year	The Toughpad A1 offers triple the standard warranty of its competitors.
KEY FEATURES							
Operating System		Android™ 3.2	Android™ 3.1	Android™ 3.1	BlackBerry Tablet OS	iOS	
Enterprise Functionality		X					Panasonic's implementation of the Android platform enables several security features necessary for enterprise and government environments that consumer tablets don't have.
Dual Core Processor		1.2 GHz	1 GHz	1 GHz	1 GHz	1 GHz	
Base Storage		16 GB	16 GB	16 GB	16 GB	16 GB	
RAM Memory		1 GB	1 GB	1 GB	1 GB	1 GB	
Front Camera (Webcam)		X	X	X	X	X	
Rear Camera		X	X	X	X	X	The Toughpad A1 has a standard 5MP camera while tablets like the Samsung Galaxy have only 3MP.

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KEY FEATURES (Cont.)							
Integrated LED Light (Rear)		X	X	X	X		LED lighting allows the unit to illuminate dark objects.
Starting Weight		2.1 lbs.	1.5 lbs.	1.2 lbs.	1.0 lbs.	1.3 lbs.	The Toughpad A1 has a significant rugged and performance advantage for only a slight difference in weight and thickness.
Thickness		0.7"	0.5"	0.33"	0.4"	0.34"	
Display	Screen Size	10.1" XGA	10.1" WXGA	10.1" WXGA	7" WSVGA	9.7" XGA	Only the Toughpad A1 and iPad have displays that are not in widescreen format, allowing for more natural viewing similar to 8.5 x 11 paper. In addition, the Toughpad A1 display is 5% larger than Motorola's and Samsung's and more than double the size of RIM's PlayBook.
	Screen Resolution	1024 x 768	1280 x 800	1280 x 800	1024 x 600	1024 x 768	
	Multi Touch	X	X	X	X	X	
	Active Digitizer	X					The digitizer improves accuracy and enables features such as signature capture, but can be disabled if lost or damaged, keeping the user working.
	Screen Brightness (nit)	500					
	Daylight-Readable	X		X			A user's productivity in outdoor conditions is greatly improved when the screen is daylight-readable.
	Anti-Reflective Screen Treatment	X					Ideal for bright or outdoor environments.
	Anti-Glare Screen Treatment	X					Reduces glare under fluorescent lighting.
Battery Life (Simulated Real-World Results)		10 hours	8.5 hours	6 hours	7 hours	10.5 hours	Based on a 2011 online comparison test conducted with Wi-Fi on, running a video at approximately 65% screen brightness.
Removable Battery		Partial					The Toughpad A1's battery can be removed in the field by a technician, while the competitor tablets have to be sent back to the manufacturers.
Software Development Tools		X			X	X	A complete Software Developer's Kit (SDK) is available for programmers to develop applications for the Toughpad A1 platform and is available on the Panasonic website.
Mobile Device Management Tools		Open					Many controls are available to IT administrators for low level management of the Toughpad A1, which is a requirement in enterprise and government environments.
OEM-Managed App Store		X			X	X	An OEM-managed app store allows the manufacturer to ensure the quality of tablet applications and also allows IT administrators to remotely manage application updates.

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Enhanced Data Security	Antivirus/Malware Protection	X					Prevents, detects and removes threats such as worms, Trojan horses, spyware and adware.
	Software Encryption	X					Protects sensitive files, storage, removable media and email.
	Embedded Hardware Encryption	X					The Toughpad A1 is equipped with a dedicated processor to keep sensitive and encrypted information separate from the processor in the device.
	Network Proxy Settings	X					Filters devices from directly accessing corporate networks.
	Enhanced VPN	X					Enables AuthenTec VPN, which can support multiple gateways.
	Trusted Boot	X					Prevents hackers from loading unsigned versions of the OS.
	Root Protection	X					Prevents "jailbreaking" which keeps hackers from modifying the internals of the OS.
	Dual-Factor Authentication	X					Requires at least two different kinds of evidence to access the computer.
	Kensington Cable Lock Slot	X					Reinforced metal lock slot to ensure the physical security of the tablet.
	HIPAA Ready	X					The Toughpad A1 meets the healthcare community's security standards to protect use/disclosure of an individual's health information.
FIPS 140-2 Compliant	X					The Federal Information Processing Standard is a U.S. government computer security standard used to accredit cryptographic modules.	
Connectivity	Micro-USB	X	X				
	MicroSDHC	X	X				
	HDMI Micro	X	X		X		
	Headphone/Mic	X	X	X	X	X	
	Speaker	X	X	X	X	X	
	Ethernet (Cradle Only)	X					
	GPS Receiver	X					The built-in satellite GPS receiver, when combined with GPS software, allows for tracking of resources and provides convenient on-screen navigation for field personnel.
	Wi-Fi Hotspot Router	X					The Toughpad A1 can serve as a Wi-Fi hotspot for up to five devices.
	Wi-Fi 802.11 a/b/g/n	X	X	X	X	X	
Mobile Broadband	Optional (4G, 3G)	Optional (4G)	Optional (3G)		Optional (3G)	4G download speeds are approximately 10-100x faster than 3G download speeds on the same carrier.	
Bluetooth®	X	X	X		X		

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