

Xplore iX104C²

XPLORE'S RUGGED TABLET PC GETS A TECHNOLOGICAL OVERHAUL AND EMERGES TOUGHER THAN EVER

BY CONRAD H. BLICKENSTORFER



There isn't a tough outdoor job the Xplore iX104C² can't handle. And the new AllVue display means the screen is always readable.

BRIEF

Xplore Technologies has once again beefed up its flagship platform, the ultra-rugged iX104C². This is an exceptionally well designed rugged mobile computer that also happens to be elegant, compact, and relatively light. This slate is a full Tablet PC with a Wacom digitizer, but you can also get a "Dual Mode" version that supports both pen and touch input. Technologically, the iX104 is up-to-date with a new Intel 733 processor and plenty enough RAM and disk. Despite its stellar IP67 rating, the device has a number of on-board jacks and connectors, so you won't constantly need a port replicator. Xplore's superior AllVue screen technology offers fantastic indoor viewing and complete outdoor readability, even in direct sunlight. This is an excellent, well-rounded product.

DURABILITY

The iX104C² with its sealed magnesium case sports an impressive IP67 rating. It is designed to take a severe beating out there in the field.

COMPETITION

WalkAbout in rugged slates. Also Panasonic, Itronix, Psion-Teklogix, Intermec, Getac, etc.

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Competition is always a good thing. Witness Hertz versus Avis, Coke versus Pepsi, Ford versus Chevy and so on. In the ruggedized mobile computing arena, slate division, the competition is between Xplore Technologies and WalkAbout Computer. The fierce battle between those two veterans of the pen computer field may be stressful to them, but it sure has elevated the state-of-the-art in rugged pen slates far beyond what we thought possible just a few years ago. And as usual when competition gets tough, the primary beneficiary is the customer. Xplore's latest is the iX104C², a freshened-up version of the company's superb iX104 platform. Applying the vast experience

Xplore had gathered over the years with its rugged GeneSys pen slates, the iX104 sports exemplary industrial design. This is a rugged machine that is not only tough, but also undeniably attractive. No matter what angle you look at it, every detail of the iX104 seems like some clever engineers thought about it for hours and days, and then went to the designers to come up with the perfect solution.

Just like WalkAbout offers the rugged RT and the ultra-rugged XRT series of essentially the same computer, Xplore uses the iX104 platform for both the economical Renegade as well as the top-of-the-line C². In our 2004 Buyer's Guide we marvelled at how Xplore managed to seal the iX104 Renegade's generous complement of ports and connectors from the elements, achieving an IP54 rating. Apparently no problem. With the iX104C²,

Xplore raised the bar again. The machine sports a stellar IP67 rating.

This means you can submerge it in a foot of water for 30 minutes. And, of course, it also passes the requisite tests for blowing rain, drip, sand and dust, salt fog, contamination by fluids (such as detergents or brake fluid) and solar radiation.

Years ago, machines that could withstand this much punishment tended to be large and heavy. The iX104 is not. Its 11.2 x 8.25 footprint is roughly that of a sheet of copy paper. Its thickness of 1.6 inches is what you'd expect from a slender notebook, and its five



THE XPLORE IX104C² IS AS GOOD AS IT CURRENTLY GETS IN THE RUGGED MOBILE MARKET



XPLORE IX104C² SPECIFICATIONS

COMPANY	Xplore Technologies
PRODUCT	IX104C ² Tablet PC
PROCESSOR	1.1 GHz Ultra Low Voltage Intel Pentium M 733
OPERATING SYSTEM	XP Tablet PC Edition 2005
COMMUNICATIONS	Via a variety of internal OEM devices (WiFi, GPRS, BlueTooth, GPS, etc.)
MEMORY CONFIGURATION	256MB to 1GB PC3200 DDR RAM
DRIVES	40GB shock-mounted 5400 RPM hard drive
SLOTS	Internal: 1 PC Card Type II, 1 mini-PCI, one OEM radio bay
DISPLAY	10.4-inch 1024 x 768 AllVue TFT
KEYBOARD	optional
PEN/DIGITIZER	Wacom active digitizer/1 pen (dual mode with touch also available)
DIMENSIONS	11.2 x 8.25 x 1.6 inches
WEIGHT	5.1 pounds including battery
HOUSING	Magnesium with rubber bumpers
OPERATING TEMPERATURE	-4 to 140 degree Fahrenheit
ENVIRONMENTAL	0-95% humidity without condensation, IP67
POWER	Replaceable 56 Watt-Hour Li-Ion battery pack
INTERFACE	2 USB, RJ45, video, audio in/out plus two sets of expansion contacts
OPTIONS	Dual mode display, vehicle dock, kbd, optical drives, port replicator, radios
PRICE	Inquire
CONTACT	www.xploretech.com

pound weight is just north of what a "thin and light" notebook weighs.

Years ago, machines as tough as this would also have been behind the technological curve, often by years. Not so here. The C² is powered by an Ultra Low Voltage Intel Pentium M 733 processor running at 1.1 GHz. It also uses the 400 MHz Intel 855GME chipset and the Intel PRO/Wireless 2200BG wireless network circuitry, earning it full Centrino status. The speedy 5400RPM 40GB hard disk is heavily shock-mounted, memory ranges from 256 to 1GB of PC3200 DDR RAM.

Xplore is especially proud of its display technology and they should be. Our test rig came with "AllVue," which Xplore describes as "an advanced LCD and digitizer assembly technology using multi-layer optic en-

hancements and production techniques to reduce screen reflectivity and glare, and enhance the overall quality of the display." Compared to a standard transmissive notebook display, Xplore claims a 86% reduction of reflective loss, a 300% increase in outdoors effectiveness, a small increase even in indoor effectiveness, all at no impact on battery life.

Can that be so? Yes it can. Indoors, the display is bright, crisp and sharp. There is none of the annoying iridescent shimmering seen on so many Tablet PC screens. And despite the hardened layer that protects the LCD and digitizer, there is also very little of the dreaded parallax effect. Outdoors, the display remains perfectly readable even in direct sunlight. This display is as close to the perfect compromise as we've seen. Xplore has a clear

advantage here. Is it perfect? It isn't, and no current display technology has it all. The AllVue display doesn't have the wide viewing angles of the Hydix display, and at an angle colors degrade into rough steps. Still, this is as good as it currently gets.

The digitizer is a standard Wacom design using a standard Wacom pen that's tethered to the unit with a two foot wire. When not in use, the pen snaps into two clips on the back of the device. A good solution.

Power comes from an easily replaceable 56 Watt-Hour Li-Ion battery. A bridge battery allows hot replacement with the computer in suspend mode.

Though built like a fortress, the Xplore IX104C² has plenty of externally accessible ports: LAN, video, audio in and out, and two USB ports. There are two speakers, an ambient light sensor, and a Kensington lock slot. A sealed door protects a SIM socket for a GPRS radio and a Bluetooth antenna. Inside there is a Type II PC Card slot, a mini-PCI slot and a OEM radio bay. There are two sets of expansion contacts, one for XPL snap-on expansion modules and the other for a desktop or vehicle docking connector. Unlike machines with slower processors, the IX104 does have a fan. It's part of a convection heat exchanger module, and it keeps the machine running cool.

The overall design of the IX104 is for portrait operation, though its screen, of course, rotates. One minor complaint is that it's easy to inadvertently push one of the nine backlit rubber buttons when holding the unit in both hands for landscape operation.

With its impressive AllVue display and excellent design and performance, the IX104C² is as good as it gets in the rugged mobile market. If you're in the market for a tough machine, put the C² on your short list. *z*