



# RuggedPCReview.com

If it's rugged, we review it and write about it

May 2011

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## Tablets, tablets and more

Wow. Almost 20 million tablets sold last year, and projections for media tablets going through the roof (Gartner says 140 million by 2015!). Though the iPad was conceived as a consumer device, tablets are increasingly used in vertical markets, and the sheer number of tablets projected simply has to be good news for the rugged market. Tens of millions will be used to tablets, accept tablets, and many will need something more rugged. Now there's an opportunity.



A big thanks to our sponsors [Advantech](#), [Motion Computing](#), [DLI](#), [DRS Tactical Systems](#), [General Dynamics Itronix](#), [Getac](#), the [Handheld Group](#), [Juniper Systems](#), [Logic Instrument](#), [MobileDemand](#), [RAM Mounts](#), [Samwell](#), and [Wimate Communications](#) for making RuggedPCReview.com possible!

## Motion CL900 -- Rugged Windows 7 multi-touch tablet



Tablet pioneer Motion Computing introduced the Motion CL900, a lightweight tablet computer with a

high-res 10-inch display and n-Trig DuoSense dual input. The tablet runs Windows 7 on Intel's new "Oak Trail" System-on-Chip Atom platform. The CL900 can handle 4-foot drops, its display is protected by Corning Gorilla Glass, and the battery is said to last 8+ hours. The CL900 is available with Gobi 3000 WWAN/GPS, dual cameras, as well as peripheral modules. Starting price is under US\$1,000. [See the [Motion CL900 tablet](#)]

**DRS ARMOR X7:** Compact rugged tablet offers versatility and almost limitless expansion potential

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DRS Tactical announced the release of the DRS ARMOR X7 rugged tablet computer, which will complement the company's larger X10 rugged tablets. The Intel Atom N450-based X7 has a 7-inch WSVGA display with auto-sensing dual input (active digitizer and resistive touch), is exceptionally rugged (6-foot drop, IP65, -4 to 140F), weighs under three pounds, and offers excellent configuration and customization potential via expansion bays and "FlexSpace" interfacing [Read about the [DRS ARMOR X7](#)]

**Getac V200:** High-performance, compact, fanless, fully rugged convertible notebook with superbright 12.1-inch wide-format display and 5-year warranty



Need a rugged, versatile notebook computer that's still compact enough to carry around in the field? The Getac V200 should be on your short list. With its superbright 1,200 nits 12.1-inch wide format display, various digitizer and touch options, and high

performance (2.0GHz Intel Core i7), the V200 offers a state-of-the-art implementation of the convertible notebook concept. It's also tough and rugged, doesn't need a fan, and has remarkably long battery life. [See full review of the [Getac V200](#)]

### Handheld Nautiz X3 -- A pocket-sized ultra-rugged multi-purpose computer

When you can't-or don't want to-carry multiple devices in the field you need a handheld that does it all. The Handheld Group's 9.5-ounce, Marvell PXA320-powered Nautiz X3 was designed to combine strong performance with extreme ruggedness and good value. The Nautiz X3, which starts at US\$999, uses Windows Mobile 6.5, has a barcode scanner, GPS, camera, WWAN, and can also be used as a smartphone. [See full review of the [Handheld Group Nautiz X3](#)]



### MobileDemand xTablet C1200: Tablet PC specialists introduce their first rugged convertible tablet computer



Mobile Demand is complementing its lineup of rugged Tablet PCs with the xTablet C1200 convertible tablet computer. The C1200 has a 12.1-inch 1280 x 800 pixel touch display with optional digitizer and runs Windows 7 on an Intel Core i5-520UM ultra low voltage processor. The 12.9 x 10.9 x 1.6 inch device weighs 5.5 pounds, has an integrated carry handle, solid state storage, a spill-resistant keyboard, and a 4-foot drop spec. I/O can be

customized via modules, and a secondary battery can boost battery life to eight hours. [See description and specs of the [Mobile Demand xTablet C1200](#)]

### **DLI 8300** -- Rugged, compact multi-purpose tablet

DLI of Laporte, Indiana, offers a full lineup of tablet computers for different purposes and in different sizes. The role of the Intel Atom-powered DLI 8300 with its 8.4-inch display is that of a general purpose tablet computer large enough to serve as a "real" computer in the field or in a vehicle, but small and portable enough to be carried around on the job. RuggedPCReview.com conducted a detailed review of the DLI 8300 and found much to like. [See full [review of the DLI 8300](#)]



### **RAM Mount:** Mounting solutions for today's media tablets



With millions of media tablets increasingly used in all walks of life and business, people need proper proper mounting solutions for them. We're taking a look at RAM Mount's media tablet mounting solutions for the iPad/iPad 2, Motorola Xoom, BlackBerry PlayBook, the Samsung tablets and any other 7- and 10-inch tablet, including lock-mounts,

an iPad case and various mounting methods. [See [RAM Mount media tablet mounting solutions](#)]

### **Advantech SOM-5890:** Powerhouse COM-Express module for embedded projects

The COM-Express standard defines small (95 x 125mm), replaceable computer modules used in numerous embedded systems applications. These boards enable massively scalable project performance. If cost and low power consumption matter, a developer may choose an Intel Atom-based COM-Express module. But leading embedded systems manufacturers now offer COM-Express boards with the latest second generation Intel Core i5/i7 processors. RuggedPCReview benchmarked the quad-core Intel Core i7-2715QE based Advantech SOM-5890 module and found 12X processor performance and 7X overall system performance compared to Atom-based boards. . Read [review of the Advantech SOM-5890](#).

### **Winmate 7-inch Rugged Tablet PC** -- Super-compact, light Intel Atom-powered rugged tablet for GPS application



Taiwanese industrial display technology and rugged solutions provider Winmate introduced a minimalist rugged device geared towards providing GPS information and computing power for military and similar deployments in the smallest possible package. The Atom Z530-powered tablet has a sunlight-readable 7-inch resistive touch display and weighs less than two pounds. [See description and specs of the [Winmate 7-inch rugged tablet PC](#)]

### **DAP launches next-gen Atom-based rugged dual-OS tablet**



DAP Technologies added the M9000 line to its growing lineup of rugged handhelds, vehicle-mounts and tablets. The M9010 tablet is a significant tech update to the M8910, using an Intel E660T Atom processor to run either Windows CE 6.0 or Windows Embedded Standard 7. There's a



bright 7-inch touch-display, support for the emerging ZigBee wireless standard, CAN bus, expandable I/O, and enough battery power for full shift operation. [See description and specs of the [DAP M9010](#)]

#### Other cool stuff we reviewed:

RuggedPCReview also did full, detailed reviews of the [Trimble Ranger 3](#), the [Panasonic Toughbook U1 Ultra](#), the [Getac MH132](#), the [Fujitsu Lifebook T580](#), the [Atid AT870](#), the [ARK-3440](#) and [ARK-3403](#) industrial Box PCs from Advantech, and the updated [Getac V100](#). And we analyzed the [Lenovo X200](#) convertible notebook, the [Fujitsu Stylistic Q550](#), the tough [VT Miltope RLC-3G](#), the [LXE Tecton](#) and [Thor](#), the [Datalogic Falcon X3](#), the [HP TouchPad](#), the [Intermec CN70 series](#), the [DT Research WebDT 372](#) (shown on the right) and more.



#### And... RuggedPCReview.com's Media Tablet Spec Table

In the beginning there was just the iPad, but now we're seeing a number of increasingly serious and competent media tablets, both in the 7-inch and 10-inch class. RuggedPCReview compiled the vital stats of two dozen of them for you. And the we keep updating the table. [See the RuggedPCReview.com [Media Tablet Spec Table](#)]

In closing, here's the benefit of what we learned in the past few months here at the RuggedPCReview lab:

- Rugged notebook and tablet makers who just switched to first-gen Core i3/i5/i7 chips must be frustrated to see those already surpassed by second gen "Sandy Bridge" CPUs.
- Our benchmarks show some low-voltage Intel i7 chips draw less power than ultra-low voltage versions. Weird, but we've seen it several times.
- Microsoft still appears to have no official plan for a tablet-optimized OS. And Android for tablets is still evolving. So Apple continues to rule with the iPad 2.
- Microsoft finally released Windows Embedded Compact 7, but as of now everything that came into our lab still used Windows 6.5, which is a mixed blessing.
- We finally got a detailed look at Windows Phone 7. It is sleek and much, much better than expected. Microsoft may not be out of the mobile business just yet.
- With the imaging industry now offering inexpensive 8-14 megapixel CMOS camera modules, we hope to see those soon in rugged mobile hardware!
- Intel keeps adding more and more Atom processors, but no one quite knows why or which one to use. Not a good way to fight the ARM crowd.

Here's to a great summer of 2011!

Conrad

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