

RuggedPCReview.com

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

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Pent-up demand means opportunity

The good news is that, according to VDC Research, mobile device shipments are expected to grow from 17 million units this year to over 25 million by 2013. The bad news is that the current figures represent quite a dip compared to what things were like before the recession. So basically we should soon be getting back to the levels of a couple of years ago. The contraction means there should be quite a bit of pent-up demand. So combined with the amazing innovation in the rugged mobile field over the past couple of years, I'd say things are starting to look pretty good.



Leaders like [Advantech](#), [Motion Computing](#), [DLI](#), [DRS Tactical Systems](#), [General Dynamics Itronix](#), [Getac](#), the [Handheld Group](#), [Juniper Systems](#), [Logic Instrument](#), [MobileDemand](#), [RAM Mounts](#), [Samwell](#), [Winmate Communications](#) and [RMT](#) seem well-positioned to fill that pent-up demand, much to the benefit of existing and potential new customers worldwide.

Handheld Algiz 7 -- A lighter and smaller ultra-rugged tablet

The advent of Intel's Atom processors a couple of years ago made possible a new generation of smaller, lighter and less expensive "netbook" computers that provide adequate performance and functionality for a wide range of applications. Likewise, we're now seeing a new generation of smaller, lighter tablet computers that use similarly targeted technology for vertical market applications. The Algiz 7 by the Handheld Group is such a product—lighter, handier and smaller than full-size tablets. RuggedPCReview.com presents a detailed assessment of the Algiz 7, its features and performance, and its suitability for tough outdoors jobs.

[See the [Handheld Algiz 7](#)]



General Dynamics Itronix GD300: An Android-based

- [MobileDemand](#)
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wearable computer/GPS/communicator



In early August of 2010, General Dynamics Itronix announced the GD300, a small wearable computer that combines rugged computing, GPS and data communication into one device specifically designed to provide access to tactical networks and

enhance situational awareness. Interestingly, the GD300 runs the Android OS, making it probably the first ruggedized device from a major provider to use Android instead of Windows CE/Mobile. [Read about the [GD-Itronix GD300](#)]

Advantech PIT-1501W -- A computer specially designed to inform and entertain patients. Will it catch on big, just like infotainment systems in airplanes?



Given the ever-escalating costs of healthcare, you'd think hospital patients would be treated like pampered guests at a 5-star hotel. Sadly, that's hardly ever the case, but if companies like Advantech have a say in the matter, hospital patients may soon have entertainment and information options far more satisfying than watching the usual ancient hospital-issue CRT TV bolted to the wall. That's because forward-looking

hospitals are starting to install "patient infotainment terminals" like the Advantech PIT-1501W we had in our RuggedPCReview.com lab for a few days. [Read about the [Advantech PIT-1501W](#)]

Will Android be the next OS of choice for tablets and handhelds?

Off the cuff, the way we see it is that Android has a better than even chance of becoming the OS of choice for tablets and other mobile devices. Android is really nothing more than another Linux distribution, but one backed and sort of run by Google. Microsoft, of course, will make the usual argument of leverage and security and integration into other Microsoft products, but the fact is that Linux itself can be at least as secure as anything Microsoft makes. Just look at the Mac OS which is also Unix-based, and Unix is the basis of Linux [[...more](#)]. In the meantime, Oracle is suing Google over certain aspects of Android, and that may throw a monkey-wrench into Android [[...more](#)].

Full review: Motion Computing J3500, now with Core 2010 processors and a terrific capacitive dual touch implementation



Motion Computing has introduced the rugged Motion J3500 tablet, a sleek, slender, full-featured, full-power tablet computer featuring an approximately 40% overall performance increase compared to the predecessor model courtesy of an ultra low voltage Intel Core i7 processor that incurs no penalty in battery life. The new machine also offers Motion's new capacitive dual touch, automatically combining capacitive touch and a Wacom digitizer. Add Gobi2000, a high res camera, more memory and larger disks, and you have a

very impressive tablet. [[... more](#)]

Bigger than a handheld, smaller than a tablet: Juniper's new Mesa Rugged Notepad!



If the new Mesa Rugged Notepad by Juniper Systems looks large, it's because it is. Aiming to offer the best of Tablet PCs and a rugged handhelds (but none of the drawbacks), the Marvell PXA320-powered Mesa runs Windows Mobile 6.5.3 on its exceptionally large 5.7-inch VGA display. Larger size means larger battery, too, and the Mesa runs up to 16 hours on a charge. Add to that exceptional ruggedness and IP67

sealing, and you have an interesting option for any number of outdoor jobs that require a bit of extra screen real estate. [... [read more](#)]

If your notebook must be REALLY small

What is a big full-size notebook is much too big, and even a handy netbook is still too large, but you do need full Windows 7 functionality and a high-res screen? Then you should look at the Fujitsu UH900 mini-notebook. The little 1-pound marvel, powered by a 1.6GHz Intel Atom Z530 chip, sports incredible 1280 x 800 pixel resolution on its jewel-like 5.6-inch display, offers multi-touch, has a full-function keyboard and a speedy 62GB solid state disk, onboard Garmin Mobile PC GPS, and good connectivity, both wired and wireless. And even the price is not out of line. So how well does it all work? Read [full review of the Fujitsu UH900](#).



The UH900 compared to a netbook and an Apple MacBook

Motorola ES400 -- A sleeker, lighter enterprise digital assistant



The Enterprise Mobility Solutions division of Motorola introduced the ES400 Enterprise Digital Assistant. Fitting somewhere between a consumer smartphone and a ruggedized handheld, the ES400 is aimed squarely at enterprise users in field sales/service, retail, healthcare, etc. The ES400 runs Windows Mobile 6.5 with a custom front end, has WiFi, GPS, a 3.2mp camera that can also scan, and 3.5G WWAN for both the GSM and the CDMA side.

With the iPhone having redefined expectations, the question is whether this sort of category-busting convergent device is what users want.. [... [read more](#)]

RuggedPCReview.com at the Handheld Group Business Partner Conference in Sweden

The Handheld Group had its annual Business Partner Conference June 2 through 4th, 2010, at the Elite Hotel Marina Tower in Stockholm, Sweden. The conference provided a venue to socialize with business partners and inform them on products, outlook and opportunities. RuggedPCReview.com was there, and here is our report.. [... [read more](#)]



Advantech PPC-157T -- Panel PCs have come a long way



There are numerous industrial and control applications that require rugged panel PCs. RuggedPCReview.com tested the Advantech PPC-157T, a versatile industrial panel computer from an experienced Taiwanese embedded and industrial systems manufacturer. The 15-inch panel offers good performance with a 2.16GHz Core 2 Duo processor, comes with your choice of touchscreen (resistive, capacitive or WAV), and offers excellent onboard connectivity, including extensive legacy support. [\[...more\]](#)

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

- Most major product lines have been upgraded to Intel's Core i5/i7 chips. They are very, very good, offering much improved performance with little or no impact on battery life.
- It's now possible to combine capacitive multi-touch with an electromagnetic digitizer. Motion's done it in the new Motion J3500, and it works very well.
- We now have the first Android-powered vertical market product in the General Dynamics Itronix GD300 handheld. Interesting!
- But Oracle rained on the Android parade with its lawsuit against Google. This could mean developers may stand by until the smoke clears, and Microsoft gets a bit more time to get its mobile act back together.
- Intel's Atom processor families get ever larger and more confusing, though the Z5xx family is scoring some nice vertical market design wins.
- 4G remains iffy. Wimax has the early lead, but LTE seems to have all the longer term edge. For now, we're seeing wide adoption of Gobi2000.

Best of luck for the rest of 2010 and tackling that pent-up demand.

Conrad

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