



Case Study

Maxx Computers

Keeping Tough Laptops Going With Seagate® EE25 Series™ Drives

Building ruggedized laptops may not be rocket science, but working for over 30 years as a consultant to NASA has certainly given engineer John Van Hooser a competitive advantage. Initially founded to offer his NASA colleagues and their friends custom-built computers like those used at work, Van Hooser Engineering quickly grew as demand for its services grew. In 2000 Van Hooser retired from NASA work and launched Maxx Computers.

Because of his close ties to NASA and the many manufacturers and distributors affiliated with it, Van Hooser can cherry-pick the best components and chassis designs for assembly into the Maxx Computers line of ruggedized laptops. These vendor relationships also enable quantity parts pricing typically available to only much larger companies. As a result Maxx Computers can sell custom-designed computers for little more than off-the-shelf units with comparable warranties.

Company

Van Hooser Engineering, Inc.—
Maxx Computers, LLC

Location

Covington, North Georgia

Contact

www.veimaxx.com

Customer Profile

Design and assembly of high-end ruggedized laptop computers for military, law enforcement and other extreme-environment applications

Maxx Computers

Keeping Tough Laptops Going With Seagate® EE25 Series™ Drives



"We hung up an EE25 Series drive by a string, marked it with an 'X' and trained a laser on it, and then had a pitching machine hit it with a fastball going 70 mph. We picked the EE25 Series drive off the floor, put it in a computer, and the drive worked perfectly"

Bill McIlvain,
VP, sales and marketing
Maxx Computers, LLC

The company's three-year unconditional warranty is another benefit of Van Hooser's 30 years of R&D work with NASA, where he found out through trial and error what works and what doesn't. Neither top secret nor proprietary, such knowledge is shared by NASA with the private sector, and Maxx Computers takes full advantage of it to select only the best available technology. In that light, its selection of the Seagate EE25 Series disk drive is particularly noteworthy.

Storage Without Compromise

When it came time to select the best ruggedized hard disk drives for its computers, Maxx Computers was not willing to accept compromise. Bill McIlvain, VP of sales and marketing, says with a chuckle, "One of our competitors takes a standard drive and encases it in a gel pack to reduce shock. What's going to happen to that gel in the middle of August in a car that's not air-conditioned? It's going to boil, and that can burst the gel pack.

"But most of the time you'll just end up with drive failures because of heat. You can't dissipate it."

After reading about the EE25 Series drive's ability to withstand extreme temperatures, McIlvain requested evaluation drives.

Proof in the Pudding (Cookie?)

"In September we put a laptop in a police cruiser at 9 a.m.," McIlvain says. "The car was parked outside, unprotected, no shade, in the middle of a hot parking lot here in Georgia. At 5 p.m. we came back out and the laptop was still running. The car's interior temperature got up to 146, 147 degrees, who knows how long it stayed above 140?"

Duly impressed, Maxx Computers testers moved on to more unusual trials.

"We took one EE25 Series drive and put it into an oven where we were baking some cookies. When people went to get the cookies, they saw a hard

drive in there," McIlvain says. "We took the EE25 Series drive out of the oven, and when it was cool enough to touch we put it in a laptop and it spun right up. That was a very dramatic way of proving the drive can take the heat."

Maxx Computers devised an equally unconventional test for shock tolerance. "At a baseball trade show we hung up an EE25 Series drive by a string, marked it with an 'X' and trained a laser on it, and then had a pitching machine hit it with a fastball going 70 mph," McIlvain says. "We picked the EE25 Series drive off the floor, put it in a computer, and the drive worked perfectly."

Reliability Is Serious Business

Such tests show an enviable flair for memorable demonstrations, but the core strength of Maxx Computers is its unrelenting commitment to product quality and reliability; here Maxx Computers is strictly business. As McIlvain puts it, "If we're going to offer a high-end product and warranty it for three years, no questions asked, we need to make sure there isn't anything substandard in it.

"For example, we use higher-end heat sinks that utilize the reverse-thermocouple process. They cost a few dollars more, but Intel makes them. NASA told Intel this is what works, and Intel said they'd build it. They don't offer them with their standard CPUs and processors."

Tough Enough...and Then Some

The sheriffs' departments and city police departments that Maxx Computers deals with typically budget for a three-year life cycle with laptops. Thanks to the extreme ruggedness of Seagate EE25 Series drives (which include a 5-year limited warranty), McIlvain has no worries. "The EE25 is made so much better than standard drives that it will last past the window that our customers normally keep their machines," he says.

To Learn More:

Seagate® EE25 Series™ Drives

For more information on utilizing EE25 Series drives, visit www.seagate.com.

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