GETAC B360 REVIEW

Super-tough, super-bright, suprisingly portable

By Matthew Elliott August 11, 2020





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# THE BOTTOM LINE

The Getac B360 is a winner among rugged laptops for providing full protection in a relatively compact package, a display that works indoors and out, hot-swappable batteries, and a best-in-class warranty.

### PROS

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- Fully rugged without being a hulk
- Bright, full HD touch display
- Dual, hot-swappable batteries
- Secure port covers and garaged stylus
- Quiet operation
- Accidental damage included in three-year warranty

### CONS

- Wobbly keyboard
- Tiny touchpad
- Stylus garage on less intuitive (left) side for most users

The trade-off with any laptop built for extreme conditions in the field is ruggedness versus usability, where you are forced to sacrifice practicality or performance for the ability to survive extreme environmental hazards. With myriad MIL-STD and waterproof certifications, the \$3,499 Getac B360 is a rugged laptop that provides ample protection for first responders, military personnel, and other workers in the field—and does so without forcing you to lug around a huge slab of a system with a low-resolution display and outdated components. The 13.3-inch Getac is quite thin and light as rugged laptops go; its full HD, 1,400-nit display looks great indoors and out; and it boasts up-to-the-minute 10th Generation Intel silicon. You wouldn't want to write the great American novel on its keyboard, but the Getac B360 takes on Dell's Latitude Extremes and Panasonic's Toughbooks with a strong effort. It wins an Editors' Choice award for offering modern components and connectivity inside a fully rugged, relatively svelte package.

### **RUGGED, BUT NOT A TANK**

The Getac B360 is available with 10th Generation Intel Core i5 or Core i7 power, up to 64GB of memory, up to two 1TB solid-state drives, and a single display option-a 13.3inch IPS touch panel with 1,920-by-1,080-pixel resolution and 1,400 nits of brightness. My \$3,499 test unit is the base configuration with a Core i5-10210U processor, 8GB of RAM, and a 256GB SSD. Except for the super-bright screen, that's a component lineup you can readily find on laptops priced below \$1,000, but as with any fully rugged notebook, most of the Getac's price goes toward its exterior build and interior damage mitigations, rather than its internal components. And Getac has a winner of a rugged chassis with the B360.



The molded top lid and built-in carrying handle are your first clues that the B360 is not an ordinary laptop but a rugged unit built for battle. At 5.1 pounds, the Getac is heavy for a 13.3inch laptop, but the extendable handle makes lugging the system easy and more secure than holding its edge. And the handle can be quickly snapped back into place so it doesn't interfere with your typing.



The matte-black and gray chassis is made of an aluminum-magnesium alloy with composite materials. The surfaces feel more like plastic th an metal, but far from the flimsy plastic found on consumer-grade laptops. There is no worrisome flex to be found. Rubber bumpers on all four corners protect the laptop from drops, and the ports that ring the unit are protected by hinged covers with rubber seals. It all adds up to a fully rugged chassis that boasts MIL-STD 810H, MIL-STD 461G, and IP66 certifications.





MIL-STD 810H testing assures the laptop can survive drops of six feet as well as hold up against vibration, humidity, extreme temperatures, and low air pressure at high altitudes. MIL-STD 461G testing checks for electromagnetic compatibility, an important consideration for military communications. Last, IP66 certification ensures sealed protection against dust and water ingress, and not just spills but also pressurized jets of water. (Here's more about how to make sense of ruggedness specifications.)

While 5.1 pounds may be heavy for your runof-the-mill clamshell, it's downright light among the rugged crowd. By comparison, the fully rugged Panasonic Toughbook 31 has a slightly smaller 13.1-inch display and tips the scales at a whopping 9 pounds, and the 14-inch Dell Latitude 7424 Rugged Extreme weighs in at 8.5 pounds. This Getac is closer in weight to semi-rugged notebooks like the 4.6-pound Panasonic Toughbook 55 and the 5.7-pound Durabook S15AB.

It's also fairly compact at 1.4 by 13.4 by 11.1 inches (HWD). Fully rugged laptops are usually much thicker (2 inches for the Latitude 7424, and 3 inches for the Toughbook 31).

# **BRIGHT SCREEN, WOBBLY KEYS**

A latch keeps the lid secured and closed. When you flip open the laptop, you'll encounter a crisp display that can be viewed in bright sunlight, a key feature for workers in the field. It also offers touch support that felt quick and responsive. You can navigate Windows with your fingertip, even if you are wearing gloves. Getac also includes a capacitive stylus for use with the touch screen. The stylus is leashed or tethered and can be stowed away in its garage on the laptop's left edge. As a right-hander, I believe I speak for most of my kind when I say having the pen attached on the right side of the laptop would make for a better experience.



Above the display sits a 1080p webcam that delivers a well-balanced picture with little of the noise that plagues lower-resolution cameras. When not in use, you can slide a privacy cover over the webcam, which is always an appreciated touch, especially on a laptop that can be used on site for commercial and military purposes. Built more for data entry while on site or riding in a Humvee or police cruiser, rather than long stretches seated at a desk writing a novel or a PCMag.com review, the keyboard feels cramped and sounds clacky. The keys feel loose with too much side-to-side movement and vertical travel. Plus, Getac double-mapped a number pad on the right side of the keyboard, and the numbers on the keys make it difficult for non-touch typists to quickly identify the letters on those keys.



The touchpad is small but offers good glide and accurately recorded my pinches, swipes and other gestures. A pair of mouse buttons sits below the pad and provides the opposite feel to the keyboard—snappy with shallow travel to make mouse clicks feel natural. Still, I'd vote for a buttonless design if that would mean getting more touchpad surface area.

### **DUAL BATTERIES, PROTECTED PORTS**

The Getac B360 offers ports on three of its sides, and each port sits behind a hinged, protective cover.





The covers can be slid into a locked position to ensure they stay closed, and rubber bladders on their insides create a tight seal to keep unwanted elements out.

On the left side of the laptop, access to the solid-state drive(s) is behind one cover and a SmartCard slot is behind the other cover. Also on the left side is the aforementioned garage for the stylus.



On the right side, you'll find SIM and SD card slots behind one cover and a power-sharing USB 2.0 port and audio jack behind the other.



There's also a blank spot on our test system that can be used for an optional bar code scanner, and you can choose to forego the SIM card slot in favor of an RF antenna pass-through for GPS.

On the back are two USB 3.1 Gen 2 Type-A ports, a Gigabit Ethernet port, HDMI and VGA video outputs, a serial port (remember those?), and the power connector.







There's also a blank area next to the VGA port for another connection, and you can opt to outfit the B360 with a DisplayPort or USB Type-C port instead of the VGA port.



On the bottom panel are two user-removable batteries, which can be hot-swapped to keep mission-critical tasks on schedule without retreating to a wall outlet.

The Getac B360 also supports the latest wireless standards, including 802.11ax Wi-Fi 6 and Bluetooth 5.1. You also have the option to add 4G LTE mobile broadband should your line of work take you away from Wi-Fi hotspots.

Getac backs the B360 with a three-year warranty that includes accidental damage coverage. For a laptop that will spend the majority of its time in adverse conditions, having accidental damage protection is a boon and something that does not come standard with Panasonic's Toughbooks or Dell's rugged Latitudes.

# PERFORMANCE: HITTING THE ROAD, HARD

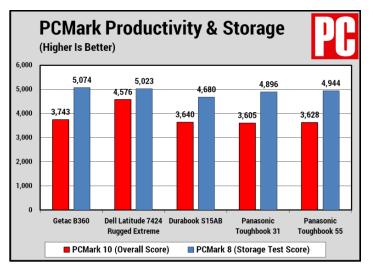
Our Getac B360 test system features a 10th Generation, quad-core/eight-thread Intel Core i5-10210U and 8GB of RAM. (This is one of Intel's "Comet Lake," not "Ice Lake," 10th Gen chips.) Getting Intel's current silicon in a rugged laptop is appreciated since many are slow to adopt the latest standards, but the Core i5 CPU along with relatively modest memory and integrated graphics put a cap on performance. Navigating Windows felt snappy, and I was able to multitask without the system lagging, but if you need to run more visual apps, you'll want to select a Core i7 chip along with more RAM. Unfortunately, there's no option for discrete graphics. I compared the Getac B360's benchmark performance to two other fully rugged laptops, the Panasonic Toughbook 31 and Dell Latitude 7424 Rugged Extreme, and two semi-rugged laptops, the Panasonic Toughbook 55 and Durabook S15AB. All feature previous-generation Intel chips and Intel integrated graphics, save the Dell which features a low-end AMD Radeon RX 540 GPU.

Test Syste	PC		
	PROCESSOR	GRAPHICS	MEMORY & STORAGE
Getac B360	Intel Core i5-10210U (1.6GHz)	Intel UHD Graphics	8GB RAM; 256GB SSD
Dell Latitude 7424 Rugged Extreme	Intel Core i7-8650U (1.9GHz)	AMD Radeon RX 540 (4GB)	16GB RAM; 512GB SSD
Durabook S15AB	Intel Core i5-8265U (1.6GHz)	Intel UHD Graphics	16GB RAM; 256GB SSD
Panasonic Toughbook 31	Intel Core i5-7300U (2.6GHz)	Intel HD Graphics 620	16GB RAM; 256GB SSD
Panasonic Toughbook 55	Intel Core i5-8365U (1.9GHz)	Intel UHD Graphics 620	8GB RAM; 256GB SSD

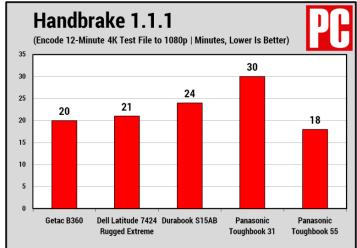
## PRODUCTIVITY, STORAGE, AND MEDIA TESTS

PCMark 10 and 8 are holistic performance suites developed by the PC benchmark specialists at UL (formerly Futuremark). The PCMark 10 test we run simulates different real-world productivity and content-creation workflows. We use it to assess overall system performance for office-centric tasks such as word processing, spreadsheet work, web browsing, and videoconferencing. PCMark 8, meanwhile, has a storage subtest that we use to assess the speed of the system's boot drive. Each test yields a proprietary numeric score; higher numbers are better.

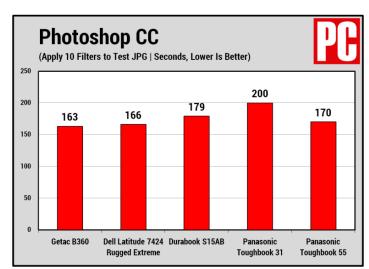
The Getac B360 failed to clear the 4,000-point hurdle that we consider excellent for PCMark 10, a feat only the Core i7-based Latitude was able to accomplish. That the Getac and its current-gen Core i5 chip weren't able to outstrip the laptops with older Core i5 parts is disappointing. Its PCIe SSD, however, aced PCMark 8's storage subtest.



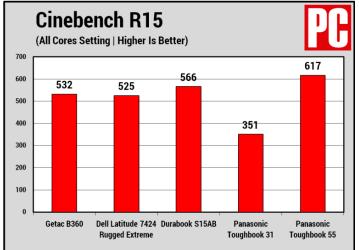
Next is Maxon's CPU-crunching Cinebench R15 test, which is fully threaded to make use of all available processor cores and threads. Cinebench stresses the CPU rather than the GPU to render a complex image. The result is a proprietary score indicating a PC's suitability for processor-intensive workloads.



We also run a custom Adobe Photoshop image-editing benchmark. Using an early 2018 release of the Creative Cloud version of Photoshop, we apply a series of 10 complex filters and effects to a standard JPEG test image, timing each operation and adding up the total. As with Handbrake, lower times are better here. The Photoshop test stresses the CPU, storage subsystem, and RAM, but it can also take advantage of most GPUs to speed up the process of applying filters, so systems with powerful graphics chips or cards may see a boost.



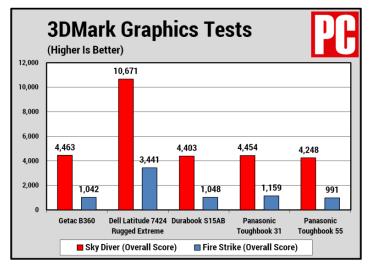
The B360 performed a bit better in our trio of multimedia tests, but its scores were still limited by the four-core Core i5 and its mainstream, rather than performance-fiend, nature. It finished first among this rugged group in our Photoshop test, second in Handbrake, and third in Cinebench.



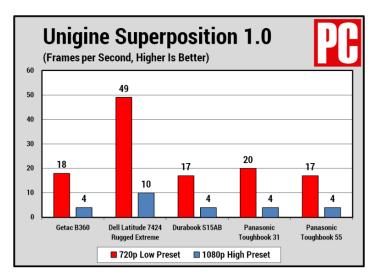
Cinebench is often a good predictor of our Handbrake video-editing trial, another tough, threaded workout that's highly CPU-dependent and scales well with cores and threads. In it, we put a stopwatch on test systems as they transcode a standard 12-minute clip of 4K video (the open-source Blender demo movie Tears of Steel) to a 1080p MP4 file. It's a timed test, and lower results are better.

### **GRAPHICS TESTS**

3DMark measures relative graphics muscle by rendering sequences of highly detailed, gaming-style 3D graphics that emphasize particles and lighting. We run two different 3DMark subtests, Sky Diver and Fire Strike. Both are DirectX 11 benchmarks, but Sky Diver is more suited to laptops and midrange PCs, while Fire Strike is more demanding and made for highend PCs to strut their stuff. The results are proprietary scores.



Next up is another synthetic graphics test, this time from Unigine Corp. Like 3DMark, the Superposition test renders and pans through a detailed 3D scene and measures how the system copes. In this case, it's rendered in the company's eponymous Unigine engine, offering a different 3D workload scenario for a second opinion on the machine's graphical prowess.

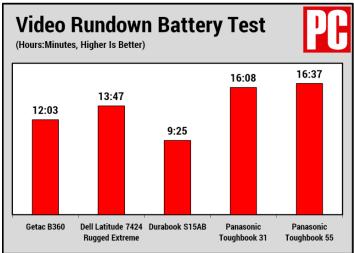


As these results show, even the Latitude's lowend dedicated graphics provide a huge boost to 3D graphics and gaming simulations compared to CPU-based integrated graphics. The numbers here are exactly in line with typical Intel integrated silicon.

While the Getac B360's 3D performance didn't set the world on fire, it managed to run these tests while remaining fairly quiet. I could hear a slight whir of the cooling fans, but the noise never got so loud as to be a distraction.

#### VIDEO PLAYBACK BATTERY RUNDOWN TEST

After fully recharging the laptop, we set up the machine in power-save mode (as opposed to balanced or high-performance mode) where available and make a few other battery-conserving tweaks in preparation for our unplugged video rundown test. (We also turn Wi-Fi off, putting the laptop in airplane mode.) In this test, we loop a video—a locally stored 720p file of the same Tears of Steel movie we use in our Handbrake trial—with screen brightness set at 50 percent and volume at 100 percent until the system quits.



The Toughbook 31 has an unfair advantage when it comes to battery life because it uses a lower-resolution display, and powering fewer pixels lets the battery run longer. Like the Toughbook 55 and the Latitude 7424, the Getac provides a full HD display and more than a half a day of runtime on a single charge. The Toughbook 55 has the longest runtime of the group by far, and you can extend that runtime even further by adding a second battery. The Getac features two hot-swappable batteries, but together they ran for a shorter period of time than the Toughbook 55's single battery. Still, you can run around the clock with the Getac if you throw a couple of extra batteries in your bag.

# FULLY RUGGED IN A SEMI-RUGGED SIZE

Until the Getac B360 came along, you needed to lug around a laptop the size of a big-city phone book if you wanted fully rugged protection. The Getac B360 is closer in size and weight to a semi-rugged laptop but boasts a fully rugged chassis with MIL-STD and IP66 certifications. And should you find a way to accidentally damage this beast, it's covered by a three-year, bumper-to-bumper warranty.



We have a few gripes about its input devices wobbly keys, tiny touchpad, and stylus anchored on the left—but we love the bright and crisp display. Usually, you're forced to decide between getting a display bright enough to use in direct sunlight or one with decent resolution; with the B360, you get both. And should you need to spend both day and night working, the dual, hot-swappable batteries offer the ability to extend your time in the field. The Getac B360 easily wins our Editors' Choice designation among rugged laptops.

## GETAC B360 SPECS

Laptop Class	Rugged
Processor	Intel Core i5- 10210U
Processor Speed	1.6 GHz
RAM (as Tested)	8 GB
Boot Drive Type	SSD
Boot Drive Capacity (as Tested)	256 GB
Screen Size	13.3 inches
Native Display Resolution	1,920 by 1,080
Touch Screen	Yes
Pannel Technology	IPS
Variable Refresh Support	None
Screen Refresh Rate	60 Hz
Graphics Processor	Intel UHD Graphics
Wireless Networking	802.11ax, Bluetooth
Dimensions (HWD)	1.4 by 13.4 by 11.1 inches
Weight	5.1 lbs
Operating System	Windows 10 Pro
Tested Battery Life (Hours:Minutes)	12:03

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