



## Help skilled workers succeed with Dell Latitude 7030 and 7230 Rugged Extreme Tablets

Instead of equipping consumer-grade tablets with rugged cases

Sedans are great for daily commutes and running errands—but you wouldn't add iron cladding to one and send it into a battle zone unless you had no other choice. So why slap a rugged case on a consumer-grade tablet for your manufacturing, logistics, or field service needs when there's an armored Humvee equivalent? In this report, we explore the productivity gains you could experience by investing in Dell™ Latitude™ 7030 and 7230 Rugged Extreme Tablets instead of equipping consumer-grade tablets with rugged cases.

We compared Dell Latitude 7030 and 7230 Rugged Extreme Tablets and comparably sized Apple® iPad Pro® and Samsung™ Galaxy Tab™ S-series tablets fitted with top-rated rugged cases in a series of tests that mimicked real-world conditions. We measured performance degradation in extreme temperatures, documented case damage and system functionality through 26 drops, determined usability during and after a 10-minute drenching, and checked screen brightness for outdoor viewability.

We found that extreme temperatures, multiple drops, and significant water exposure had less effect on the Dell Latitude 7030 and 7230 Rugged Extreme Tablets than they did on the consumer-grade tablets outfitted with rugged cases we tested. Both Dell Latitude Rugged Extreme Tablets also provided better outdoor visibility.



Get more consistent performance in extreme heat and cold



Retain usability after 26 hard drops



Resume work after significant water exposure



Unlock outdoor productivity with enhanced sunlight readability

## How we tested

### 10-inch tablet comparison

| Dell   | Apple  | Samsung   |
|--|--|---|
| Latitude 7030 Rugged Extreme Tablet  | iPad Pro   | Galaxy Tab S9   |
| <ul style="list-style-type: none"> <li>▶ 10.1-inch tablet</li> <li>▶ Powered by Intel® vPro® with an Intel Core™ i5-1240U processor and 16GB memory</li> <li>▶ Rugged tablet cost: \$2,552.04</li> </ul> | <ul style="list-style-type: none"> <li>▶ 11-inch tablet</li> <li>▶ Powered by an Apple M2 chip and 8GB memory</li> <li>▶ Consumer-grade tablet and rugged case cost: \$988.95</li> </ul> | <ul style="list-style-type: none"> <li>▶ 10.4-inch tablet</li> <li>▶ Powered by a Qualcomm® Snapdragon 8 Gen 2 processor and 12GB memory</li> <li>▶ Consumer-grade tablet and rugged case cost: \$869.94</li> </ul> |

### 12-inch tablet comparison

| Dell  | Apple  | Samsung  |
|---|--|--|
| Latitude 7230 Rugged Extreme Tablet   | iPad Pro   | Galaxy Tab S9+   |
| <ul style="list-style-type: none"> <li>▶ 12-inch tablet</li> <li>▶ Powered by Intel vPro with an Intel Core i5-1240U processor and 16GB memory</li> <li>▶ Rugged tablet cost: \$3,030.31</li> </ul> | <ul style="list-style-type: none"> <li>▶ 12.9-inch tablet</li> <li>▶ Powered by an Apple M2 chip and 8GB memory</li> <li>▶ Consumer-grade tablet and rugged case cost: \$1,328.95</li> </ul> | <ul style="list-style-type: none"> <li>▶ 12.4-inch tablet</li> <li>▶ Powered by a Qualcomm Snapdragon 8 Gen 2 processor and 12GB memory</li> <li>▶ Consumer-grade tablet and rugged case cost: \$969.94</li> </ul> |

### Performance tests

To measure performance in extreme heat and cold, we used Geekbench 6, a cross-platform benchmark, in three environments: room temperature (75°F/23.9°C), extreme cold (-20°F/-28.9°C), and extreme heat (122°F/50.0°C).

### Durability tests

To see how the tablets fared after more than two dozen hard drops, we set our in-house drop table to 4 feet high and dropped each tablet 26 times. To simulate rain, we placed each tablet under a shower for 10 minutes. To calculate readability in bright sunlight, we used a light meter to measure nit brightness while the tablets were unplugged.



### Skilled worker use cases

In this report, text in the navy boxes represents fictional scenarios that are relevant to the results of our hands-on testing. Though the companies aren't real, the examples represent a picture of the concerns organizations like yours may face in the real world.

For a deeper dive into our testing parameters and procedures, a tablet and rugged case cost breakdown, and detailed results of our hands-on testing, see the [science behind the report](#).

## Focus on work instead of workarounds

The more built-in features their tablets have, the easier it is for your skilled workforce to stay productive. Publicly available documentation shows that of the tablets we tested, the Dell Latitude 7030 and 7230 Rugged Extreme Tablets provide a more full-featured Microsoft 365 experience and include more built-in ports, connectivity, and battery options for a wide variety of skilled worker use cases. The Dell tablets were also the only ones with glove-capable touchscreens.

Table 1: Feature information on the 10-inch tablets we tested. Source Principled Technologies.

|                 | Dell   | Apple   | Samsung  |
|-----------------|--|---|--|
| 10-in tablets   | Latitude 7030 Rugged Extreme Tablet <sup>1,2</sup>   | iPad Pro (11-inch) <sup>3,4</sup>   | Galaxy Tab S9 <sup>5,6</sup>   |
| Connectivity    | <ul style="list-style-type: none"> <li>▶ Wi-Fi® 6E</li> <li>▶ Bluetooth® 5.3</li> <li>▶ GPS</li> <li>▶ 5G WWAN (optional)</li> <li>▶ Compatible with the FirstNet emergency network</li> </ul>   | <ul style="list-style-type: none"> <li>▶ Wi-Fi 6E</li> <li>▶ Bluetooth 5.3</li> <li>▶ GPS/GNSS</li> <li>▶ Compatible with the FirstNet emergency network</li> </ul>                       | <ul style="list-style-type: none"> <li>▶ Wi-Fi 6E</li> <li>▶ Bluetooth 5.3</li> <li>▶ GPS</li> <li>▶ Compatible with the FirstNet emergency network</li> </ul>                               |
| Ports and slots | <ul style="list-style-type: none"> <li>▶ 2x USB-C® ports</li> <li>▶ 1x USB-A port</li> <li>▶ 1x microSD card slot</li> <li>▶ 3x user-programmable buttons</li> <li>▶ 1x docking connector</li> <li>▶ 1x contacted or contactless smart card reader (optional)</li> <li>▶ 1x fingerprint reader (optional)</li> </ul> | <ul style="list-style-type: none"> <li>▶ 1x Thunderbolt™ 4 port</li> </ul>  | <ul style="list-style-type: none"> <li>▶ 1x USB-C port</li> <li>▶ 1x microSD card slot</li> </ul>  |
| Batteries       | <ul style="list-style-type: none"> <li>▶ Single, replaceable ExpressCharge or Long Life Cycle options</li> <li>▶ Dual, hot-swappable (optional)</li> </ul>   | <ul style="list-style-type: none"> <li>▶ Single, non-removable battery</li> </ul>   | <ul style="list-style-type: none"> <li>▶ Single, non-removable battery</li> </ul>  |
| Microsoft 365   | <ul style="list-style-type: none"> <li>▶ Windows 11 Pro OS provides a full-featured, computer-like experience with Microsoft 365 desktop apps.<sup>7</sup></li> </ul>  | <ul style="list-style-type: none"> <li>▶ Apple iPadOS® OS delivers a limited-feature, smartphone-like experience with Microsoft 365 mobile and Office Online apps.<sup>8</sup></li> </ul> | <ul style="list-style-type: none"> <li>▶ Google™ Android™ OS delivers a limited-feature, smartphone-like experience with Microsoft 365 mobile and Office Online apps.<sup>9</sup></li> </ul> |



Table 2: Feature information on the 12-inch tablets we tested. Source Principled Technologies.

|                 | Dell   | Apple   | Samsung   |
|-----------------|--|---|---|
| 12-in tablets   | Latitude 7230 Rugged Extreme Tablet <sup>10</sup>  | iPad Pro (12.9-inch) <sup>11</sup>  | Galaxy Tab S9+ <sup>12</sup>  |
| Connectivity    | <ul style="list-style-type: none"> <li>▶ Wi-Fi 6E</li> <li>▶ Bluetooth 5.3</li> <li>▶ Pass-through Wi-Fi, GPS, and 5G WWAN connectivity (optional)</li> <li>▶ Compatible with the FirstNet emergency network</li> </ul>  | <ul style="list-style-type: none"> <li>▶ Wi-Fi 6E</li> <li>▶ Bluetooth 5.3</li> <li>▶ GPS/GNSS</li> <li>▶ Compatible with the FirstNet emergency network</li> </ul>                       | <ul style="list-style-type: none"> <li>▶ Wi-Fi 6E</li> <li>▶ Bluetooth 5.3</li> <li>▶ GPS</li> <li>▶ Compatible with the FirstNet emergency network</li> </ul>                              |
| Ports and slots | <ul style="list-style-type: none"> <li>▶ 2x USB-C ports</li> <li>▶ 1x USB 3.2 Gen 1 port with PowerShare</li> <li>▶ 1x microSD card slot</li> <li>▶ 1x MicroSIM card slot</li> <li>▶ 1x HDMI or USB-A I/O bay (optional)</li> <li>▶ 1x RJ-45, Mini Serial RS-232, or barcode scanner I/O bay (optional)</li> <li>▶ 1x contacted or contactless smart card reader (optional)</li> <li>▶ 1x fingerprint reader (optional)</li> </ul> | <ul style="list-style-type: none"> <li>▶ 1x Thunderbolt 4 port</li> </ul>   | <ul style="list-style-type: none"> <li>▶ 1x USB-C port</li> <li>▶ 1x microSD card slot</li> </ul>   |
| Batteries       | <ul style="list-style-type: none"> <li>▶ Single, replaceable, ExpressCharge battery</li> <li>▶ Dual, hot-swappable (optional)</li> </ul>   | <ul style="list-style-type: none"> <li>▶ Single, non-removable battery</li> </ul>   | <ul style="list-style-type: none"> <li>▶ Single, non-removable battery</li> </ul>   |
| Microsoft 365   | <ul style="list-style-type: none"> <li>▶ Windows 11 Pro OS provides a full-featured, computer-like experience with Microsoft 365 desktop apps.<sup>13</sup></li> </ul>   | <ul style="list-style-type: none"> <li>▶ Apple iPadOS OS delivers a limited-feature, smartphone-like experience with Microsoft 365 mobile and Office Online apps.<sup>14</sup></li> </ul> | <ul style="list-style-type: none"> <li>▶ Google Android OS delivers a limited-feature, smartphone-like experience with Microsoft 365 mobile and Office Online apps.<sup>15</sup></li> </ul> |





## Factory operations use case

To increase productivity and workflow efficiency, ABC Manufacturing wants to invest in mobile devices that help its workforce align production schedules, ensure consistent production line functionality, and avoid delays in final assembly. They use Microsoft 365 apps for communication, collaboration, and information sharing. With Windows-based Dell Latitude 7030 and 7230 Rugged Extreme Tablets, their workforce can fulfill orders with safety gear on, access process guides in extreme temperatures, and drop the rugged tablets while tracking key performance indicators (KPIs). And they can do all this without taking off their gloves or deploying a stylus, fearing downtime whenever the tablet gets wet, or working around the editing limitations of Microsoft 365 mobile and Office Online apps.

## Manageability, security, and productivity

The Dell Latitude 7030 and 7230 Rugged Extreme Tablets we tested come with built-in remote manageability tools, multi-layer security protections, and automated services to ease the burden on users and IT.

### Intel vPro Enterprise for Windows

Dell Windows PCs powered by Intel vPro with 12<sup>th</sup> Gen Intel Core processors benefit from comprehensive remote manageability and hardware security features, including Intel Active Management Technology (Intel AMT), which allows IT to access powered-off devices; Intel Endpoint Management Assistant (Intel EMA), which enables IT to manage the tablets remotely and securely over the cloud; and Intel Hardware Shield, which provides below-the-OS security at the firmware and hardware levels.<sup>16</sup>

### Dell Rugged Control Center

Dell Rugged Control Center is a pre-installed application that users can utilize to personalize their rugged device experience and enhance productivity. It does this by making mission-critical tasks—such as camera and barcode scanner operation, GPS configuration, Wi-Fi and Bluetooth enabling and disabling, and keyboard backlight, night mode, and programmable button configuration—easily accessible.<sup>17</sup>

### Dell SupportAssist for Business PCs

SupportAssist is installed on most Dell Windows PCs. SupportAssist for Business PCs is smart technology designed to minimize manual troubleshooting and disruptions with end-to-end IT control. According to Dell, “When you deploy SupportAssist for Business PCs via TechDirect, your PCs can now self-heal with our library of remediation scripts, and you get visibility to your entire fleet with telemetry-driven insights.”<sup>18</sup> SupportAssist for Business PCs automatically updates BIOS, drivers, firmware, and applications; removes virus- and malware-infested files; adjusts network settings; and scans PC hardware to find and deliver “fleetwide proactive and predictive detection for faster issue resolution.”<sup>19</sup>

### The Dell Latitude Rugged portfolio

The Dell Latitude 7030 and 7230 Rugged Extreme Tablets we tested are part of a larger Dell portfolio of rugged laptops and tablets, all designed to “provide computing power and communications in difficult or extreme environments.”<sup>20</sup> You can dial in exactly what you need with a range of screen sizes, weights, battery options, Intel Core processors, and, in the Latitude 5430 Rugged Laptop, NVIDIA graphics.<sup>21</sup>

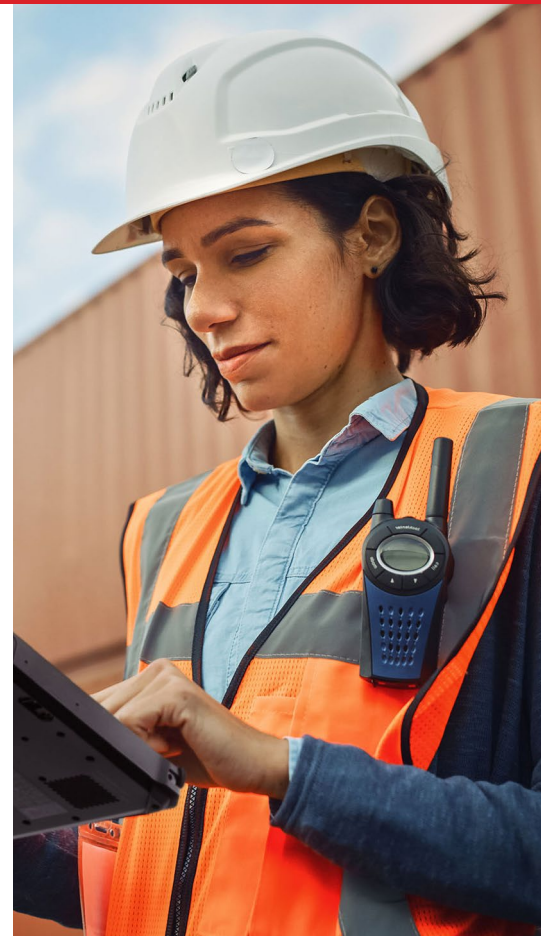
## Stay productive in extreme temperatures

The consumer-grade Apple iPad Pro and Samsung Galaxy Tab S9 tablets we tested are designed to work optimally in temperature-controlled, sheltered environments 32°F to 95°F (0°C to 35°C).<sup>22,23</sup> While a rugged case will help protect those tablets from outside forces, it can't change the limitations of the components within the tablets themselves. By contrast, the Dell Latitude 7030 and 7230 Rugged Extreme Tablets we tested are designed to perform well in temperature extremes from -20°F to 145°F (-28.9°C to 62.78°C).<sup>24</sup>

**Cold weather:** The consumer-grade tablets we tested are designed to shut off when they get too cold (32°F/0°C), and the rugged cases we used were not insulated. Exposure to lower temperatures can cause consumer-grade tablet screens to freeze and internal components to become brittle, which shortens their lifespan.<sup>25</sup> But the problems don't stop there. One of the key ways to damage a consumer-grade tablet is to move it too quickly from a cold car or truck to a warmer environment, such as a heated office or home. As with laptops, the rapid temperature shift can cause condensation, which could lead to moisture within the tablet.<sup>26</sup>

**Hot weather:** For consumer-grade tablets, temps above 95°F/35°C are worse than cold because "heat speeds up the chemical reactions that make [consumer-grade] batteries lose their capacity."<sup>27</sup> Even temperate climates can cause problems for field service technicians, utility, and delivery personnel: On a clear, sunny 70°F/21.1°C day, the temperature inside a closed vehicle can reach 104°F/40°C within half an hour and 113°F/45°C within an hour.<sup>28</sup> For not-so-temperate climates, OSHA considers outdoor heat index temps between 91°F/32.7°C and 103°F/39.4°C to be of moderate risk level to working humans.<sup>29</sup> That means consumer-grade tablets aren't built to handle the same conditions that humans are routinely expected to work in.

Extreme temperatures can even cause problems for consumer-grade tablets in climate-controlled warehouses and shops, where the buildings are hard to heat and/or insulate, and HVAC units are only able to cool within a 20-degree difference between the outside and inside air.<sup>30</sup>



### Transportation and logistics use case

Good Logistics is constantly looking for ways to optimize operations and reduce resource consumption. By outfitting their warehouse and yard staff with Dell Latitude 7030 and 7230 Rugged Tablets instead of the consumer-grade tablets we tested, the flow of information and goods is less likely to be interrupted by extreme temperatures, their IT team has access to the remote manageability and hardware security features available with devices powered by the Intel vPro platform, and the workers are better able to read their screens in bright sunlight.



## Get more consistent performance in extreme heat and cold

In the 10-inch tablet comparison, the Dell Latitude 7030 kicked up performance a skosh in extreme heat (122°F/50.0°C) and throttled back 17.1 percent in extreme cold (-20°F/-28.9°C). The Apple iPad Pro (11-inch) performed much more poorly in extreme heat (122°F/50.0°C) and didn't work at all in extreme cold (-20°F/-28.9°C). Performance on the Samsung Galaxy Tab S9 was the most sporadic: The Geekbench 6 CPU performance score jumped 6 percent in extreme cold and plummeted to 40 percent of its room temperature score in extreme heat.



### Geekbench 6 CPU performance scores (single core)

Normalized to room temperature performance for each tablet | Higher is better

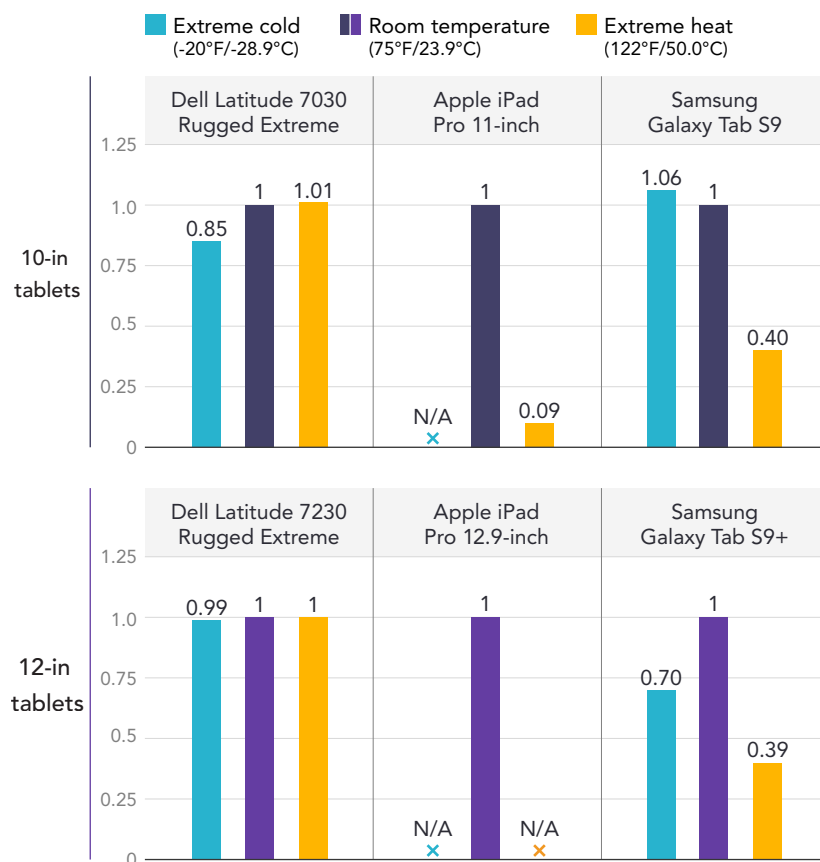


Figure 1: Geekbench 6 CPU performance scores on all tablets in extreme heat and extreme cold normalized to scores at room temperature. Higher is better. N/A means the tablet did not function at that temperature. Source: Principled Technologies.

In the 12-inch tablet comparison, the Dell Latitude 7230 performance remained steady in extreme heat (122°F/50.0°C) and in extreme cold (-20°F/-28.9°C). The Apple iPad Pro (12.9-inch) didn't work at all in either extreme weather condition. Performance on the Samsung Galaxy Tab S9+ plummeted in both weather extremes—with seriously diminished results in the extreme heat category. We assigned the value of 1 to the room temperature scores and show the high heat and extreme cold results as relatively greater or lesser. For full performance data, see the [science behind the report](#).

### Supply chain management use case

Endless Space Warehousing is implementing computerized Maintenance Management (CMMS) software to streamline maintenance procedures, eliminate paper stacks, and enhance team communication. While technicians can access work orders and maintenance tasks on desktops, tablets, and smartphones, Reena Sommer, Ph.D. for Click Maint CMMS says, "much of the administrative work can be better performed on desktop versions."<sup>31</sup> By providing their skilled workers with Dell Latitude 7030 and 7230 Rugged Extreme Tablets that perform like desktops, they get the best of both worlds.

## Remain functional after 26 hard drops

Many people invest in screen protectors and rugged cases to protect consumer-grade tablets from the bumps and bruises of hard use. But as football players know, pads and helmets may protect you, but they do not toughen you up. Plus, much like a boxer or MMA fighter, many consumer-grade tablets look fine after a couple of hard hits—but their cognitive functions may start to suffer.

In our tests, the Samsung tablets sustained the worst damage. In the 10-inch comparison, the Samsung Galaxy Tab S9 touchscreen cracked on drop 3, when the tablet hit the floor face-first. Its cracked touchscreen continued to deteriorate over the remaining drops. While the Galaxy Tab S9 was still technically functional after drop 26, the touchscreen was usable only when we used the Samsung S Pen—no fingers. After 24 hours, we rechecked the Samsung Galaxy Tab S9, and the tablet was completely unusable. In the 12-inch comparison, the rugged case on the Samsung Galaxy Tab S9+ bent on the first drop. By drop 26, many of the clips that held the screen protector in place had broken off and the screen protector itself was hanging on by a thread. We feel anyone using this tablet would need to replace the \$69.95 rugged case at this point. For detailed results of our hands-on testing and to get a breakdown of the specific tablets and rugged cases we used in testing, please read the [science behind the report](#).

Table 3: Results of 4-foot drop testing on all tablets after 26 drops from multiple angles. Source: Principled Technologies.

|                           | Dell                                | Apple                                 | Samsung                           |
|---------------------------|-------------------------------------|---------------------------------------|-----------------------------------|
| 10-in tablets             | Latitude 7030 Rugged Extreme Tablet | iPad Pro 11-inch with a rugged case   | Galaxy Tab S9 with a rugged case  |
| Appearance after 26 drops | Light scuffing on edges and corners | Light scuffing on edges and corners   | Glass screen shattered            |
| Usability after 26 drops  | Fully functional                    | Fully functional                      | Unusable                          |
| 12-in tablets             | Latitude 7230 Rugged Extreme Tablet | iPad Pro 12.9-inch with a rugged case | Galaxy Tab S9+ with a rugged case |
| Appearance after 26 drops | Light scuffing on edges and corners | Light scuffing on edges and corners   | Rugged case was barely usable     |
| Usability after 26 drops  | Fully functional                    | Fully functional                      | Fully functional                  |



### Field services use case

Very Big Utility is addressing evolving customer needs by equipping every employee with the data and capabilities they need to personalize customer interactions and quickly resolve issues. They already have Dell OptiPlex systems in the contact centers and administrative offices, and management has Dell Latitude laptops, so investing in Dell Latitude 7030 and 7230 Rugged Extreme Tablets in the field sets them up for success in multiple ways. First, there's a certain ease of integration that comes from expanding infrastructure that IT is already familiar with. Second, as this report has outlined, field workers could expect multiple performance and durability benefits from working closely with tablets that are as capable as they are.

### The challenges of a cracked tablet screen

- ▶ Touchscreen malfunctions
- ▶ External debris can damage internal parts
- ▶ The battery may drain faster
- ▶ Potential finger damage



## Resume work after significant water exposure

Inclement weather isn't the only thing that can kill a tablet; rain exposure and beverage spills are also a concern. Unlike the consumer-grade tablets we tested, the Dell Latitude 7030 and 7230 Rugged Extreme Tablets are dust tight and watertight against low-pressure water exposure (IP-65 rating).<sup>32,33</sup> Introducing any liquid to the inner working of a tablet can do more than zap internal circuitry—the loss of a usable work device can gut productivity and jeopardize the data stored inside. There are water removal services available. For example, Staples offers in-store TekDry® services that pull the water out of a wet tablet, but they admit they can't save all devices. TekDry services for a tablet, at the time of this report, cost \$69.99.<sup>34</sup>

To simulate very heavy rain-like conditions, we placed each tablet under a shower for 10 minutes. First, we positioned each tablet in portrait orientation, and after 5 minutes, we adjusted the tablet to be positioned in a landscape orientation. In our tests, the Dell Latitude 7030 and 7230 Rugged Extreme Tablets stayed powered on the whole time, had no visible damage, and were totally functional after we removed them from the shower—so you don't have to worry if you spill a drink on it or you accidentally leave it in the rain. The Apple iPad Pro tablets we tested would not power on.

Table 4: Results of rain testing of 10-inch tablets after 10 minutes under a heavy spray of water. Source: Principled Technologies.

|   | Dell                                | Apple                               | Samsung   |
|---|-------------------------------------|-------------------------------------|---|
| 10-in tablets                                 | Latitude 7030 Rugged Extreme Tablet | iPad Pro 11-inch with a rugged case | Galaxy Tab S9 with a rugged case  |
| Remained powered on                           | ✓ Yes                               | ✗ No<br>Shut down after 2 minutes   | ✓ Yes   |
| Functional after 20 minutes in dry conditions | ✓ Yes                               | ✗ No<br>Would not power on          | ✓ Yes   |
| Free from visible signs of water damage       | ✓ Yes                               | ✓ Yes                               | ✓ Yes.<br>However, water was trapped under the rugged case's screen protector |

Table 5: Results of rain testing of 12-inch tablets after 10 minutes under a heavy spray of water. Source: Principled Technologies.

|   | Dell                                | Apple                                 | Samsung   |
|---|-------------------------------------|---------------------------------------|---|
| 12-in tablets                                 | Latitude 7230 Rugged Extreme Tablet | iPad Pro 12.9-inch with a rugged case | Galaxy Tab S9+ with a rugged case   |
| Remained powered on                           | ✓ Yes                               | ✓ Yes                                 | ✓ Yes   |
| Functional after 20 minutes in dry conditions | ✓ Yes                               | ✗ No<br>Would not power on            | ✓ Yes   |
| Free from visible signs of water damage       | ✓ Yes                               | ✓ Yes                                 | ✓ Yes.<br>However, water was trapped under the rugged case's screen protector |



## Unlock outdoor productivity with enhanced sunlight readability

It can be hard to see, let alone read anything on a consumer-grade tablet screen in bright sunlight. While you can install a screen protector to minimize the glare, move to a darker location, or fiddle with display contrast, wouldn't it be nice if you just didn't have to fuss with it? The Dell Latitude 7030 and 7230 Rugged Extreme Tablets have outdoor-readable, anti-glare, and anti-smudge polarizer displays, which makes it easier to read maps, check job orders, and pull up pertinent product or service delivery information.<sup>35,36</sup>

For this comparison, we used a light meter to measure nit brightness while the tablets were unplugged. We found that the Dell Latitude 7030 and 7230 Rugged Extreme Tablets provided up to 2.3 times more nits while unplugged.



Up to 2.3x brighter screen

Screen brightness (nits) | Higher is better

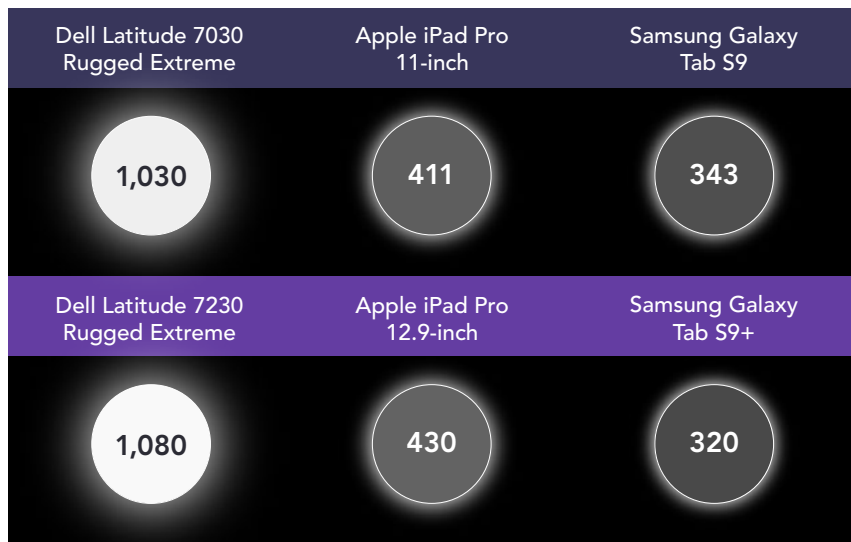


Figure 2: Screen brightness of 10- and 12-inch tablets measured in nits. The circles represent the brightness results relative to one another as a percentage transparency of white where 1,100 nits would appear as 100 percent white. Higher is better. Source: Principled Technologies.

### Nit picking

A nit measures the luminous intensity spread over the tablet screen. Just as a 60-watt bulb is brighter than a 45-watt bulb, a display that possess a brightness level over 1,000 is significantly brighter than one in the 300 to 400 range.

According to How-To-Geek, "A screen with a lot of nits will look bright and clear even on the sunniest of days."<sup>37</sup>

### Consultant use case

Concierge Consultants help streamline IT equipment procurement for federal, state and local government agencies. Our hands-on performance and durability testing shows they could recommend Dell Latitude 7030 and 7230 Rugged Tablets instead of consumer-grade tablets outfitted with rugged cases for city workers who maintain public facilities in difficult conditions, emergency personnel who respond to natural disasters, and soldiers headed down range.



## Conclusion

In our hands-on testing, the Dell Latitude 7030 and 7230 Rugged Extreme Tablets showed that they are better equipped to help skilled workers than consumer-grade Apple iPad Pro and Samsung Galaxy Tab S9 tablets in multiple ways. They provide more built-in capabilities and features than the consumer-grade tablets we tested. And, while they were more expensive than the rugged-case fortified consumer-grade options we tested, their rugged claims were more than skin deep.

In our performance and durability tests, the Dell Latitude 7030 and 7230 Rugged Extreme Tablets performed better in demanding manufacturing, logistics, and field service environments than consumer-grade tablets with rugged cases. Both Rugged Extreme Tablets, with their greater thermal range, suffered less performance degradation in extreme temperatures, never failed and were merely scuffed after 26 hard drops, survived a 10 minute drenching with no ill effects, and were easier to view in direct sunlight than Apple iPad Pro and Samsung Galaxy Tab S9 tablets.

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