The Dell Latitude 7220 Rugged Extreme tablet performed better than Apple iPad Pro, Samsung Galaxy Tab S7+ and Microsoft Surface Pro 8 counterparts in simulated extreme weather conditions and after multiple drops.

By Andrew Glinka | July 13, 2022

For those whose job does not involve sitting behind a desk in an air-conditioned office, it is important to utilize a device that has been designed to perform in hot, cold, dusty, damp and other extreme environments that would damage a standard PC or tablet. The Dell Latitude 7220 Rugged Extreme Tablet is the perfect device to withstand the day-to-day rigors of a unique work environment and help you remain productive in mixed-environment industries such as construction, manufacturing, surveying, police, firefighting and military.

In the study, Principled Technologies found that the Dell Latitude 7220 Rugged Extreme Tablet brought with it more capabilities and features than the tested competitor tablets with rugged cases.¹

**Extreme Temperatures**

When tested in extreme temperatures, the Dell Latitude 7220 Rugged Extreme Tablet performed consistently well in conditions that skilled-labor pros such as service techs and construction workers face daily. The competing devices didn't do so well. The Microsoft Surface Pro 8 shut down in extreme heat and cold and the benchmark performance of the Apple iPad Pro 11-inch and Samsung Galaxy Tab S7+ suffered in extreme heat.
Resistance to Heavy Rain

During simulation of heavy rain-like conditions, the Dell Latitude 7220 Rugged Extreme Tablet stayed powered on the entire time, had no visible damage, and was fully functional after the test. You will not have to worry if it gets wet while being used on a boat or needs to be used in the rain. The three tablets in their rugged cases did not fare as well - none remained powered on for the entirety of this test.

<table>
<thead>
<tr>
<th></th>
<th>Dell Latitude 7220 Rugged Extreme</th>
<th>Apple iPad Pro 11-inch</th>
<th>Microsoft Surface Pro 8</th>
<th>Samsung Galaxy Tab S7+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remained powered on</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Shut down after 1 minute</td>
<td>Shut down after 5 minutes and 30 seconds</td>
<td>Shut down after removal from wet conditions</td>
<td></td>
</tr>
<tr>
<td>Functional after 20 minutes in dry conditions</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Touchscreen unusable</td>
<td>Would not power on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free from visible signs of water damage</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Screen appeared damaged</td>
<td>Water seeped into the screen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Resistance to Multiple Drops

The Dell Latitude 7220 Rugged Extreme Tablet fared better during the drop tests than all three tablets within their after-market rugged cases and was the last to sustain damage. Microsoft Surface Pro 8’s glass screen shattered when it was dropped on its front.
Readable in Bright Sunlight

It can be difficult to see the screen of your device outdoors, but the Dell Latitude 7220 Rugged Extreme Tablet has an outdoor-readable, anti-glare, and anti-smudge polarized display, which makes it easier to read maps, check job orders, and pull up pertinent product or service delivery information. Principled Technologies found that Dell Latitude 7220 Rugged Extreme Tablet provided up to 2.9 times more nits while unplugged and 2.4 times more when plugged in.

Figure 2: Screen brightness measured in nits. Higher is better. Source: Principled Technologies.

What is a nit?

The more nits your tablet has, the brighter the display is. A nit measures the luminous intensity spread over the tablet screen. “A screen with a lot of nits will look bright and clear even on the sunniest of days.”

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The key to productivity is having the right tool for the job, so if your industry requires durable devices and you want to focus on efficiency instead of worrying about device limitations, it might be time to consider investing in the Dell Latitude 7220 Rugged Extreme Tablet.

For More Information

As the Principled Technology study demonstrates, Dell Latitude 7220 Extreme Tablet offers better durability and screen brightness than its competitors. Please be sure to click on the following links for more fascinating insights into the overall findings of the Principled Technologies researchers.

- [Full Report: Dell Latitude 7220 Rugged Extreme Tablet vs. three competitors](#)
- [Science Behind the Report: Dell Latitude 7220 Rugged Extreme Tablet vs. three competitors](#)
- [Infographic: Dell Latitude 7220 Rugged Extreme Tablet vs. three competitors](#)
- [Video: Dell Latitude 7220 Rugged Extreme Tablet vs. three competitors](#)

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1 Based on “The Dell Latitude 7220 Rugged Extreme Tablet brings many advantages to skilled labor use cases,” a Principled Technologies report, May 2022.