

**Panasonic**

**TOUGHBOOK**

# RUGGED CONFUSION

Rugged Confusion Research Executive Summary:  
Advice for buyers of rugged mobile computing devices

**intel**

**opinion  
matters**

# Foreword

Buyers beware. With an increasing number of manufacturers adding a wide range of rugged sounding names and classifications to their mobile computing devices, it is very easy to buy an inappropriate solution for a workforce. This can be a very costly mistake for the business and, in turn, be very frustrating and demotivating for the users.

This independent research, conducted by Opinion Matters and commissioned by Panasonic, shows that the language being used by manufacturers of business and consumer devices is confusing the marketplace. Extreme terms to describe devices are being thrown around like confetti in a bid to convince buyers of the durability and suitability of a device – whether for the business professional, outside worker or consumer. Is it any wonder that the research shows buyers are confused?

Just because a mobile device has an IP Rating or a Military Standard compliant logo or claims to be water or drop proof, does not mean it is fit for purpose. Is the product light and ergonomic enough to be used effectively by the mobile worker, as well as simply durable? Can the manufacturer supply independent certificates to support all its rugged claims? Does it come with the connectivity options that the workforce requires for connection to its office systems? All these questions and more are important considerations for the buyer if they are to specify a device that will deliver. A well-chosen rugged mobile computing device can deliver a transformation in workforce productivity and be a practical and useful tool for the user – providing a long-term return on investment.

As a result, I would recommend all buyers examine the manufacturers' claims very closely; ask to see test details and certificates. Examine whether the testing was undertaken independently or even under laboratory conditions and then test the products themselves, in the field, with a thorough pilot evaluation before buying.

## Buyer priorities changing

It's also clear from the research that the priorities of businesses are evolving when it comes to rugged devices. Devices that are just tough no longer meet the need. Buyers need manufacturers of their rugged devices to have considered important issues such as the type of viewing screen, battery life, power management, the security of data and the device's communications capabilities.

I hope this research helps buyers of rugged notebooks, tablets and handhelds to see through the smog and that it provides them with some useful tips and questions when considering the right type of rugged mobile device for their workforce. Only by manufacturers being much more transparent about the language they use and their rugged claims can we continue to deliver on our promise of transforming mobile workforce productivity.

## SUSAN BLACK

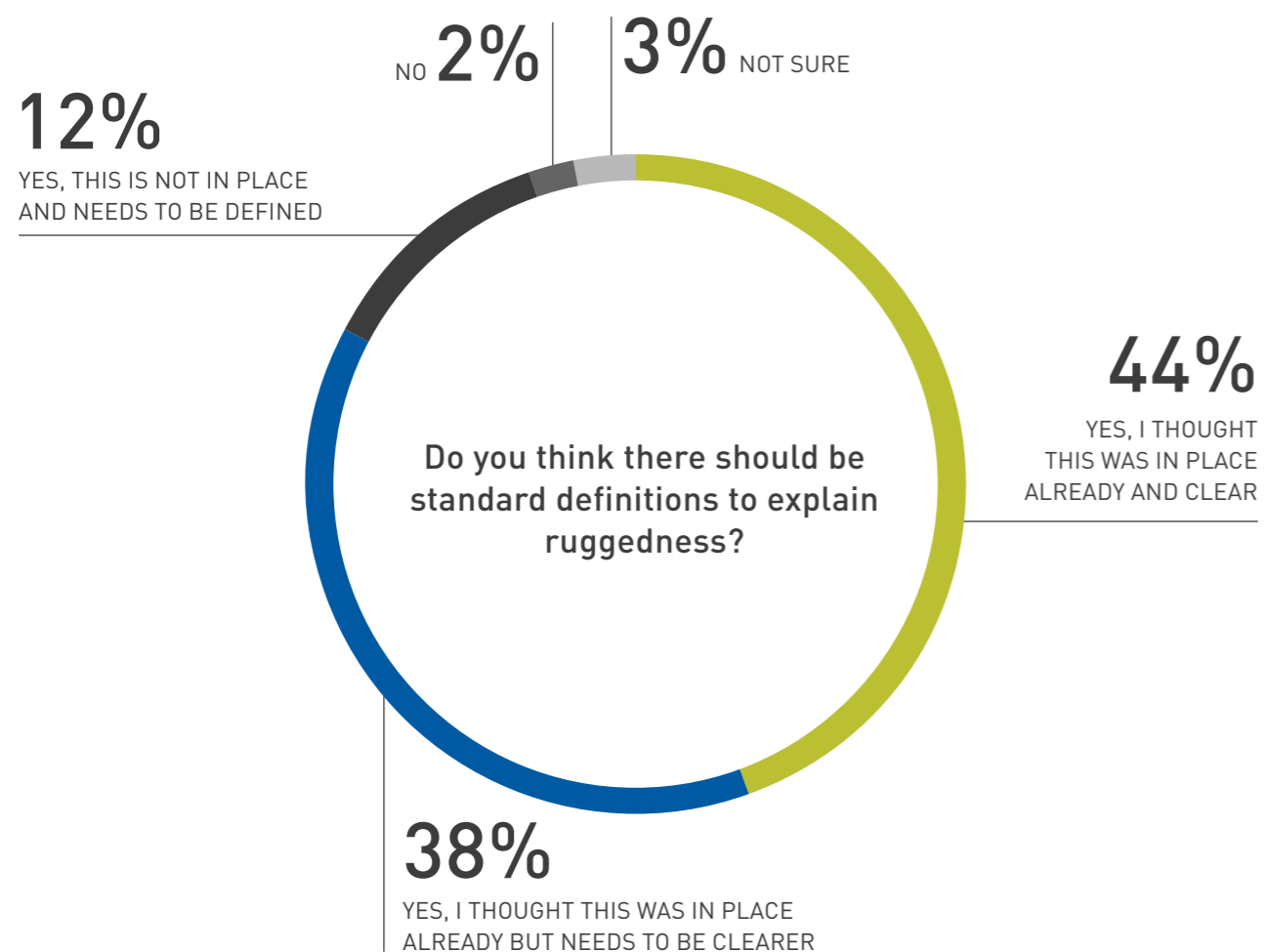
General Manager Enterprise  
Solutions Division for Panasonic Canada Inc.



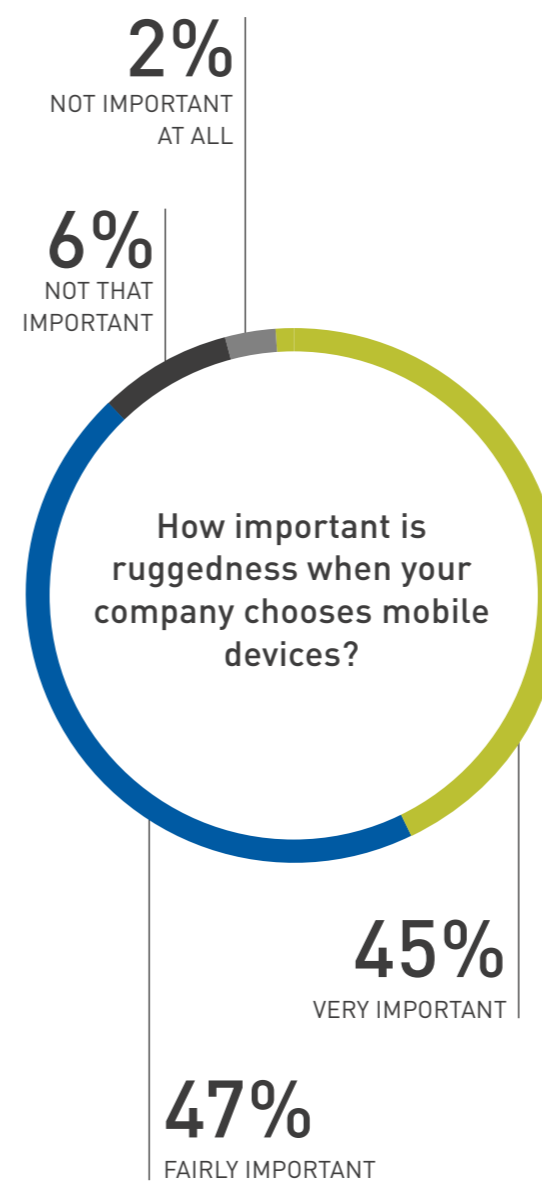
# Key Research Findings

Buyers of rugged mobile computing devices are confused by the terminology describing just how tough their notebooks, tablets and handheld devices are.

## Confusion over rugged standards



## Growing importance of rugged devices



**82%**

of business buyers of mobile computing devices believe standards for ruggedness are already in place – and yet none exist.

**92%**

of business buyers said the ruggedness of their notebooks, tablets and handheld devices was very or fairly important to them when considering new purchases for their workforce.



# Confusion over terminology

Many recognized common rugged terms but when it came to proving their understanding of these terms, the majority were unsuccessful.

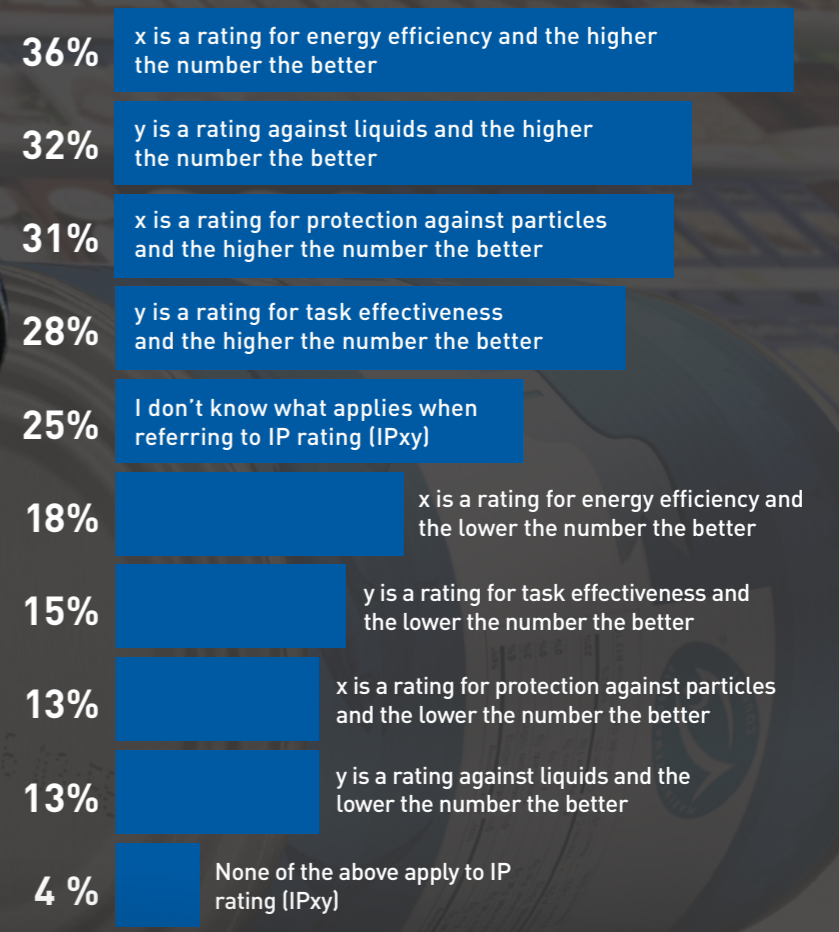
## Which of the following are you aware of?



# IP Ratings

Less than half of buyers were aware of Ingress Protection (IP) Ratings and less than a third were able to correctly identify that the rating was for protection against particles and liquid and the higher the rating the better the protection.

## When referring to IP Rating (IPxy) which of the following apply?



# Military Standard

# 70%

of buyers believed or expected the terms "MIL-STD compliant" and "tested to MIL-STD" to be a consistent measurement – they are not.

6%

None of the following

11%

I don't know what MIL-STD compliant or tested to MIL-STD means in terms of measurement but wouldn't expect it to be a consistent measurement

Which of the following relates to your understanding of "MIL-STD compliant" or "tested to MIL-STD"?

13%

It isn't a consistent measurement

46%

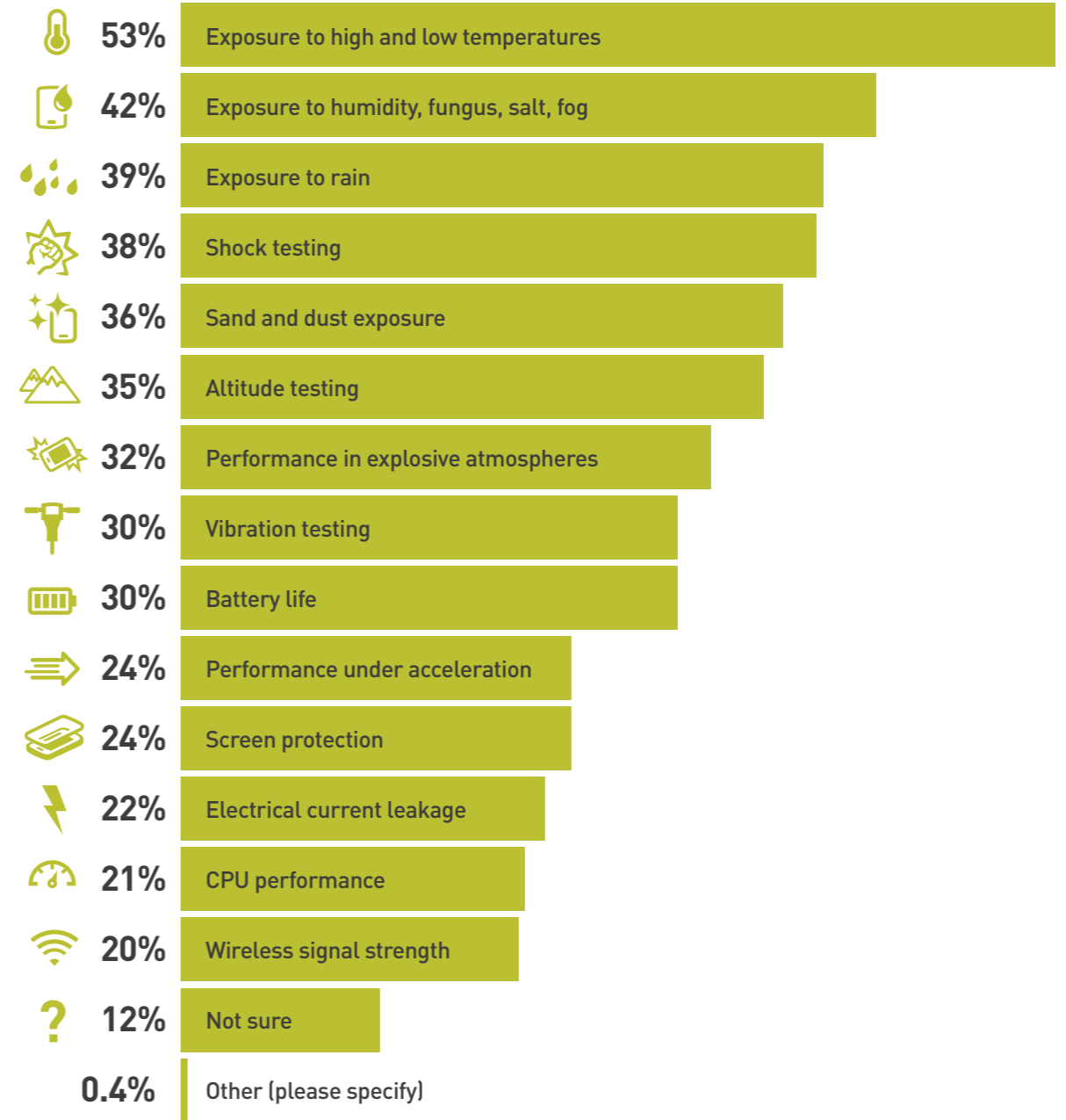
It's a consistent measurement

25%

I don't know what MIL-STD compliant or tested to MIL-STD means in terms of measurement but would expect it to be a consistent measurement

Buyers were wildly confused by what was covered in the commonly quoted US Military Standard 810G, with 30% of respondents incorrectly believing it applied to battery life.

What do you think is performance tested as part of Military standard 810G / MIL-STD 810G? (Tick all that apply)



In reality, MIL-STD-810 is a series of lab tests designed by the U.S military to test equipment limits in various environmental conditions where it is expected to be used. Although prepared specifically for military applications, the standard is also often used commercially.

There are a wide range of conditions covered by the standard but common commercial tests include shock or drop, dust, water and extreme temperatures. The key is to check which tests apply to the product and to ask for proof of test certificates.

# Over-reliant on manufacturers' claims

To add to the risk, 6% of buyers confirmed that they do not undertake any tests of their own when buying devices. They stated that they believed the manufacturers' claims.

As well, 2% of buyers confirmed that they do not consider rugged tests to be relevant for their company.



**2%**  
Rugged tests are not relevant for our company

**6%**  
We do not conduct any rugged testing as we believe in the vendor claims/certifications

**1%**  
Not sure

**21%**  
The minimum of tests widely used to claim that a device is rugged regardless of how they will be used for our company

What level of rugged testing does your company check the manufacturer has undertaken before buying mobile devices?

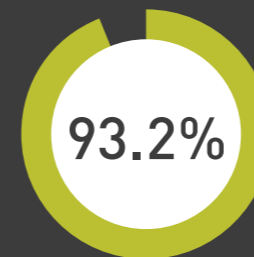
**18%**  
Tests pertinent to the widest possible range of challenges the user / device will face when using them for our company

**20%**  
All of the tests possible for the device regardless of how they will be used for our company

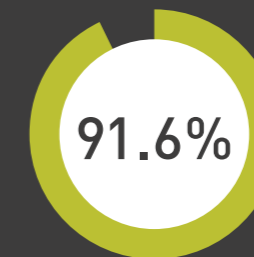
**31%**  
Tests pertinent to the main challenge or challenges the user / device will face when using them for our company

## How important is it that the following elements of a device are ruggedized (e.g. made durable)?

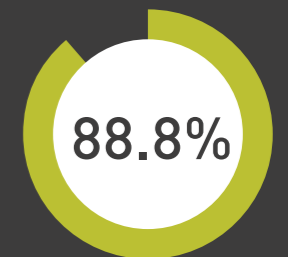
Ranked by Very Important and Important combined.



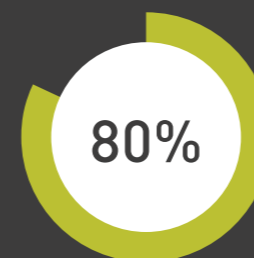
Connectivity



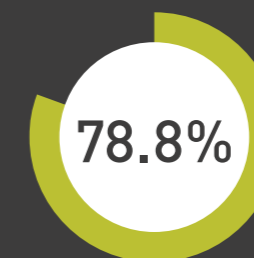
Device and data security



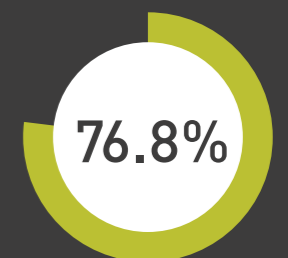
Protection against external environment, screen, keyboard, housing



Expandability



Removable/swappable battery



Removable storage

The research was undertaken by Opinion Matters, an independent research company, that questioned 250 Canadian technology buyers of mobile devices.

## Toughbook's advice for business buyers of rugged mobile computing devices

### Always ask your vendor:

- To supply MIL-STD-810G / MIL-STD-810H and IP certificates to support any testing or standards claims.
- How their products are engineered to offer light weight without compromising ruggedness or durability.
- If the Military Standard tests have been carried out on one single unit or if they used multiple units to fulfil the tests.
- Which display options their devices support.
- For a device with a high capacity battery option and exchangeable design to improve TCO and ROI.
- Which ports and interfaces are included in the main unit without adapter cables.
- How they support seamless data transfer and the latest connectivity standards.
- How they optimize power management on their devices.



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Take a look at our full range of rugged devices and resources:  
<https://na.panasonic.com/ca/computers-tablets-handhelds>

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