



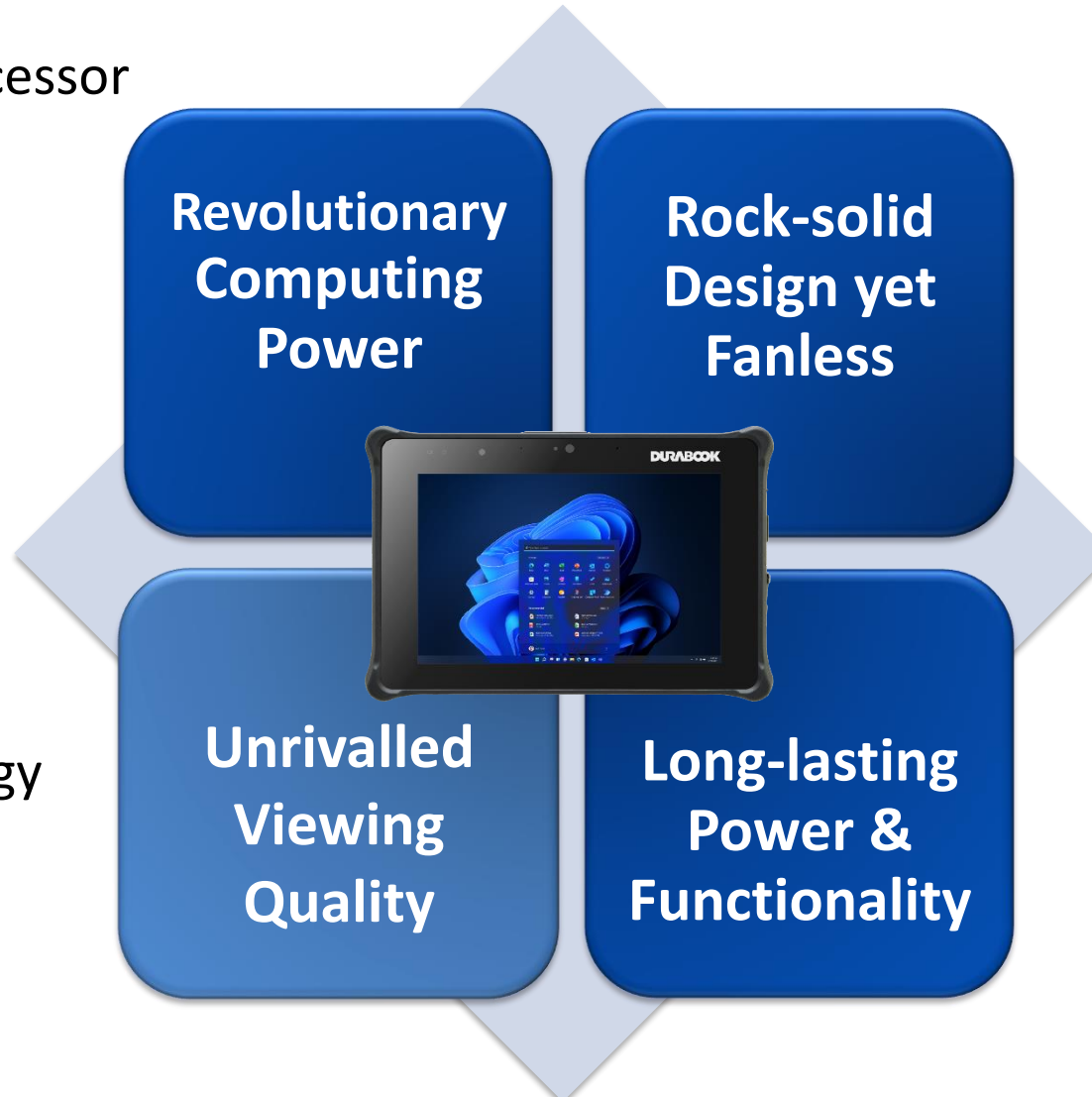
DURABOOK R8

INTRODUCTION

Durabook Marketing Division

UNIQUE SELLING PROPOSITION

- 12th Intel® Core Processor
- Intel® Xe Graphics
- Wi-Fi 6E AX211
- Thunderbolt 4
- Compact and Lightweight (860g)
- 8" HD LCD with DynaVue® Technology and up to 800 nits
- 4 Touch Modes



- Fanless Design
- IP 66, 6' Drop
- MIL-STD-810H
- MIL-STD-461G
- ANSI/UL C1D2
- Wide Range Temperature (-20°C to 60°C)
- Long-Lasting Battery Life and Swappable Battery
- Battery Charging Protection

TARGETS & APPLICATIONS

Applications

- Remote and Assets Management
- Inspection and Maintenance
- Warehouse Management
- Automotive Diagnostic



Professional Service



Transport & Logistics



First Responder



Automotive



R8 FEATURES HIGHLIGHT

THE WORLD'S ONLY FANLESS 8" FULLY RUGGED TABLET

- **12th** Gen. Intel® processors - **450% - 800%** faster than competitor devices running on Intel® Atom® CPUs.
- **Fanless Design** with zero downtime.
- **8" HD LCD** (1280 x 800) 800 nits sunlight readable display with optional digitizer support.
- Standby Mode with swappable battery design (optional).
- Battery Charging Protection Technology.



**Dyna
Vue**



REVOLUTIONARY COMPUTING POWER

12TH GENERATION INTEL® CPU

- R8 is the world's only 8" tablet solution equipped with the latest Intel **12th Alder Lake** CPU. Processor's options are from Pentium Gold to Core i7 U-series.
- R8 basic solution - Pentium® Gold 8500 processor, up to **450%** faster than Intel® Atom® CPUs.
- R8 advanced solution – Core™ i7-1250U up to **800%** faster than Intel® Atom® CPs.

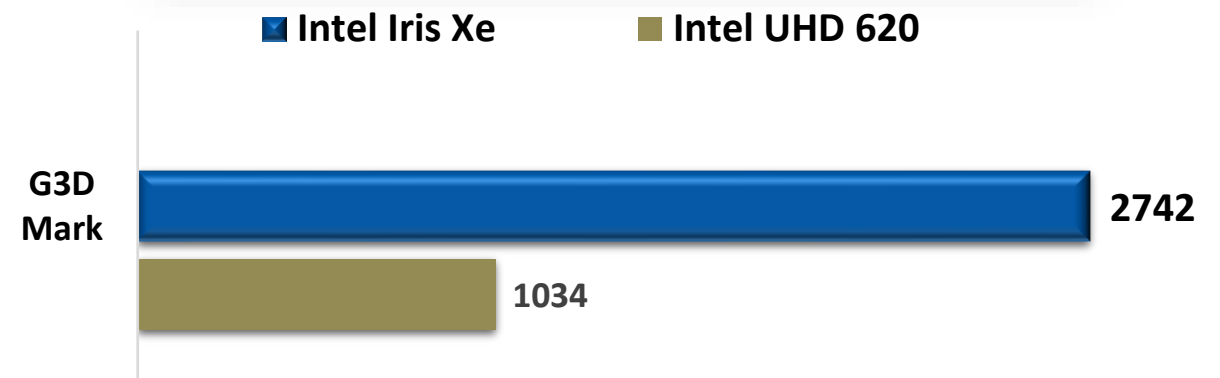


	Intel® Atom x7-Z8750	Intel® Pentium Gold 8500 Alder Lake	Intel® Core i5-1230U Alder Lake	Intel® Core i7-1250U Alder Lake
Turbo Speed	Up to 2.56 GHz	Up to 4.2 GHz	Up to 4.0 GHz	Up to 4.8 GHz
# of Physical Cores	4	1P+4E	2P+8E	2P+8E
Cache	2MB	8MB	12MB	12MB
CPU Mark	1,373	6,180	9,160	10,937

GRAPHIC PERFORMANCE

INTEL® IRIS XE GRAPHICS

- The R8 comes with Intel® Iris Xe Graphics clocked 150 MHz higher than UHD 620 results in **2.65x** faster 3D effective speed - *Better Than Enough* in daily usages.



Source: [PassMark](#)

THUNDERBOLT™ 4 TECHNOLOGY

UNIVERSAL CABLE CONNECTIVITY

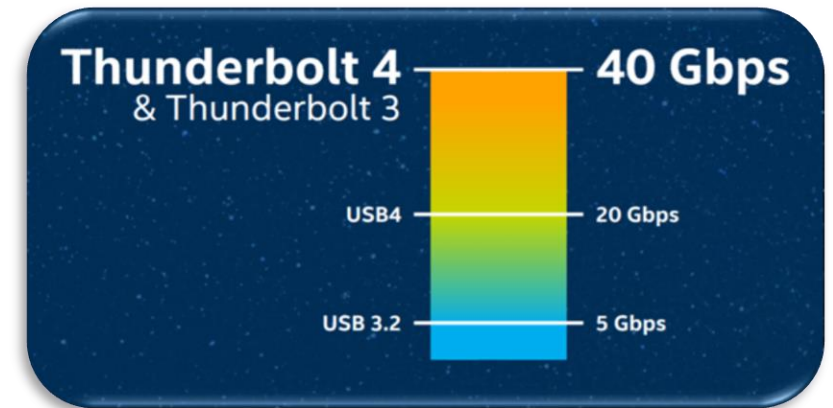


THUNDERBOLT™

Thunderbolt 4 is the latest version of Intel's Thunderbolt line.

Thunderbolt 4 is more powerful and makes connecting the modern workspace more flexible and simpler than ever.

- Delivers 40Gb/s of bandwidth
- One port supports multiple protocols
 - USB 4
 - DisplayPort
 - PCIe
- Support up to **2x** 4K external displays
- It is backwards compatible with Thunderbolt 3 & USB-C
- Maximum flexibility for docking station
- **Bi-directional power**
 - Power share + power delivery (PD)



One universal port makes it simple to connect to multiple protocols




SEAMLESS CONNECTIVITY

- Intel Wi-Fi 6E AX 211 with max. speed of 9.6Gbps is **10 times** faster than AC 8265 with max. speed only 867Mbps.
- Bluetooth V5.2 bandwidth is **8x** greater than V4.2, which is capable connecting “multiple devices” at once.



DURABOOK R8	Market Solution A	Market Solution B
AX 211	AX 200	AC 8265
V5.2	V5.2	V4.2

	Emission Speed	Effective Range
 Bluetooth® 5.2	3.0 MB/s	Max 300 meters
Bluetooth V4.2	1.5MB/s	Max 100 meters

GOVERNMENT SECTOR

R8 is designed with **RF Tri-pass-through** (WI-FI, WWAN, GPS), so in-field professionals stay connected with the centralized database in real time.



COMPACT-SIZED YET FANLESS

EXTREME POWER, ULTRA COMPACT

At just 20.5 mm (0.81") thin and weighing only 0.86kg (1.9lb), the R8 brings a light new edge to the fully-rugged class of small size tablets.

- Palm Size: **227mm x 150mm**
- Thin & Slim: **20.5mm (0.81")** thickness
- Lightweight: **0.86kg (1.9lb)**



20.5mm (0.81")





**Dyna
Vue**

VIEW EVERY DETAIL

THE NEW GENERATION OF DYNAVUE® TECHNOLOGY

Default with 8.0" LCD (1280x800) display
with 800 nits DynaVue® sunlight readable display.
The new DynaVue® light-filtering technology
provides a high contrast ratio (CR) to eliminate
reflection and deliver the best clarity.

High Brightness



Light Filtering Technology



ANTI-REFLECTIVE



DynaVue®

**Dyna
Vue**

Increased Clarity &
Wider Viewing Angle

TOUCH IN AND OUT

4 TOUCH MODE AND OPTIONAL DIGITIZER SOLUTION



- ✓ 4 touch modes: glove, stylus, water & finger mode.



Slim & light for seamless input



New Stylus

R8 comes with a slim stylus as standard, a more precise alternative to your fingertips. It allows you to easily control and navigate your tablet. A stylus can provide increased accuracy and deliver more pristine linework than that of your fingertip.

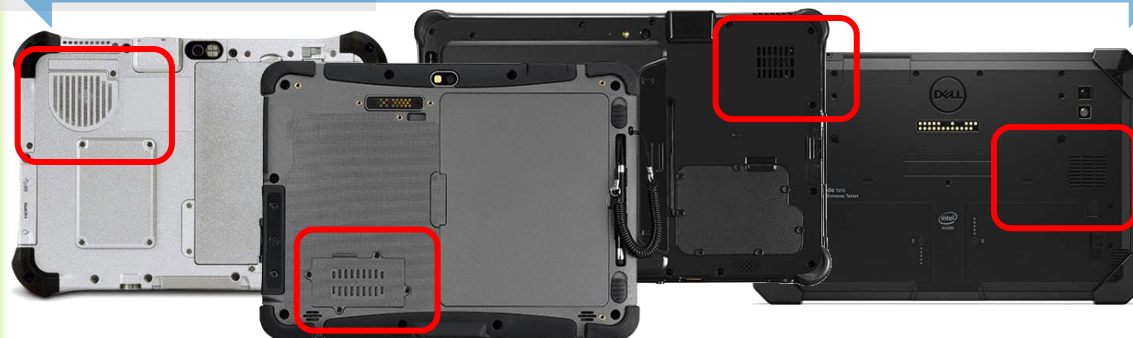
FANLESS DESIGN FOR THE MOST CHALLENGING ENVIRONMENTS

- Zero Downtime
- Fan failure is one of most common reasons lead to system overheat, and therefore damaging other components. Especially in desert environment, the fan failure rate is becoming higher.
- Fanless design also means **free-of-noise**. In some user scenarios, such as battlefield, hospital and stealth mode, every peace matters.
- R8 provides best performance with better thermal in this compact design.



Market Solution

Potential Failure



Acoustic Test	
WIN Durabook R8	0 dBA
Market Solution A/B/C	37-40 dBA

DROP RESISTANCE

BUILT TO LAST IN EVERY APPLICATIONS

Warehouse



~4.5 ft height

DURABOOK R8

- ✓ 26 drops
- ✓ 6 ft (~183cm)
- ✓ All drops performed on one unit, operating.



LOGISTICS



~5 ft height

FIRE TRUCK



~4 ft height

HEAVY MACHINE



~6 ft height

MORE RUGGED THAN EVER

MIL-STD-810H CERTIFIED, 6 FEET DROP AND IP 66

- With excellent design know-how, the R8 is able to withstand harsher environmental challenges than ever.
- R8 is MIL-STD 810H certified (6' Drop, Shock, Vibration, Rain, Dust, Altitude, Freeze/Thaw, High/Low Temperature, Temperature Shock, Humidity, MIL-STD 461G & ANSI C1D2.



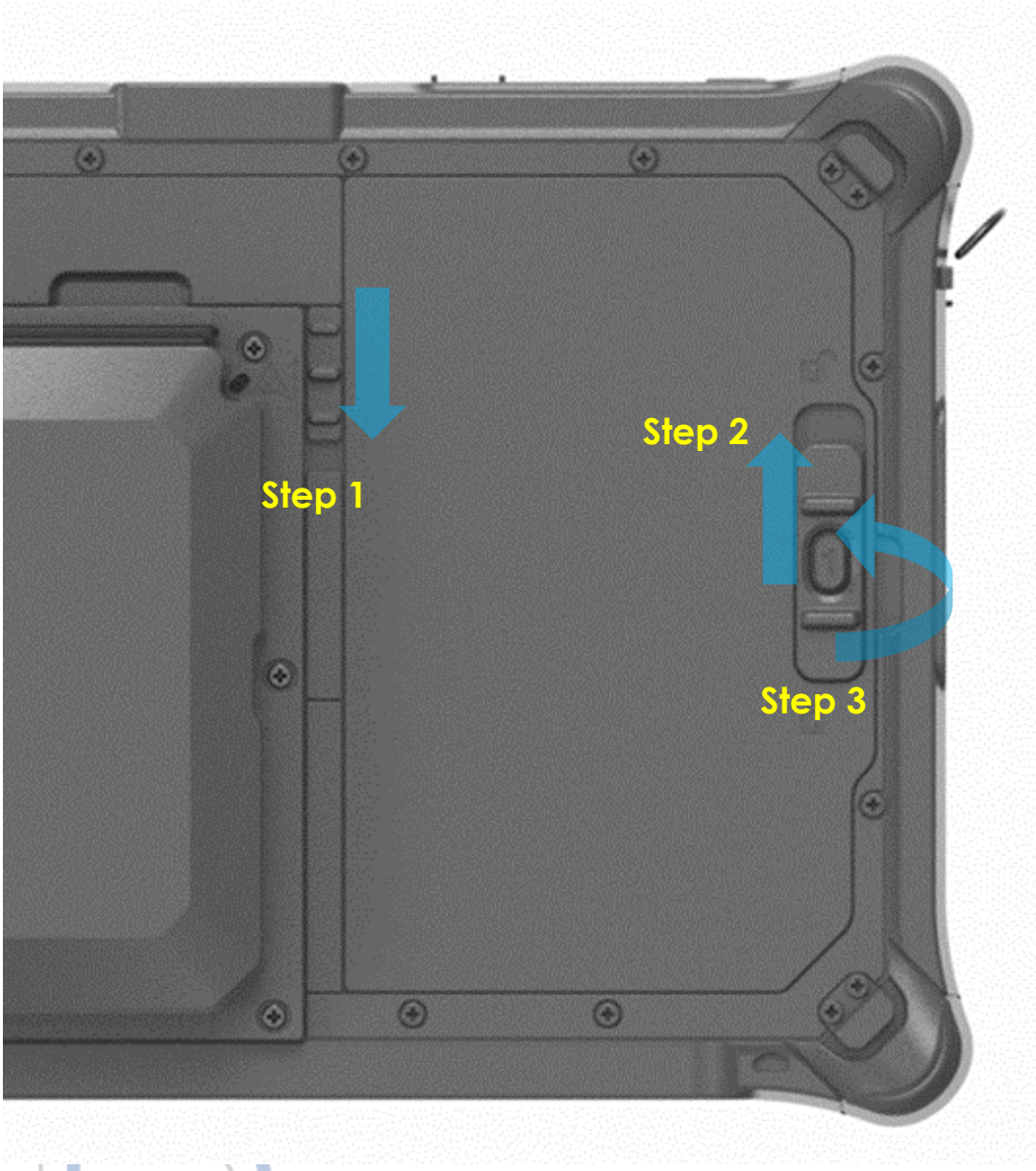
Rugged Features	
Durabook R8	6 feet drop + IP66 + MIL- STD 4161G
Market Solution A	5 feet drop + ANSI C1D2
Market Solution B	
Market Solution C	

NON-STOP MOBILITY

EASY BATTERY SWAPPABLE CAPABILITIES

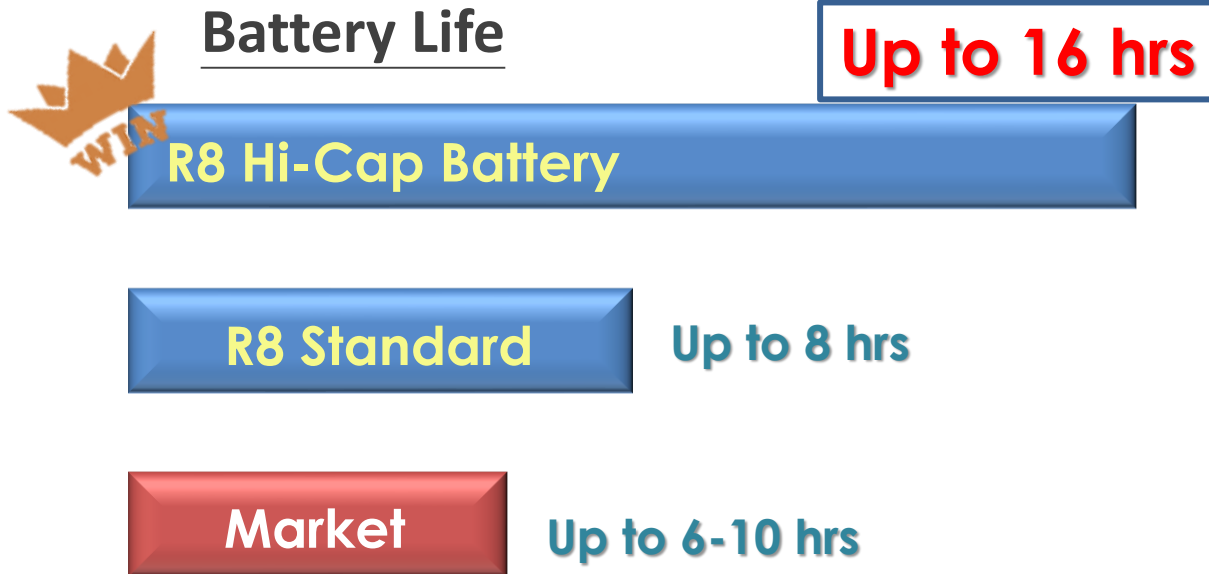
ONE, TWO, THREE and GO!

Work never interrupted with the friendly mechanical design for easy battery swappable capabilities and full protection that minimize the working downtime.



MARKET LEADER FOR POWER SUPPLY

The R8 is the market leader in battery performance with up to **16 hours** per single battery. In addition, the R8 is designed which allows the tablet to enter an efficient power saving state while stay awake and connected with limited background activities when screen is dimmed.



Durabook R8 Hi-Cap Battery



With optional 7,200 mAh **Hi-Cap battery**, field workers can work all-day long without changing battery in hazardous environments.

BATTERY CHARGING PROTECTION

To reduce battery aging, Durabook has developed four battery charging modes with enhanced charging algorithms for our customers to choose from.

4 Battery modes:

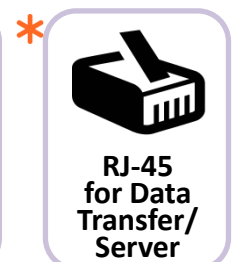
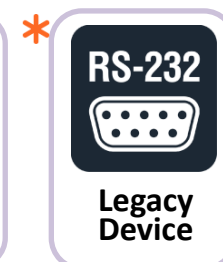
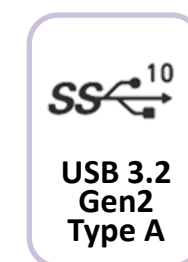
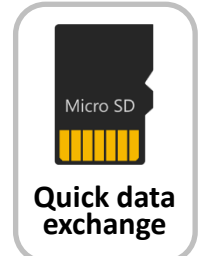
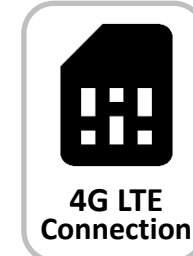
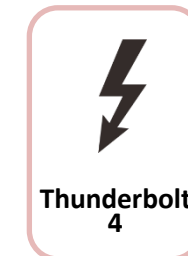
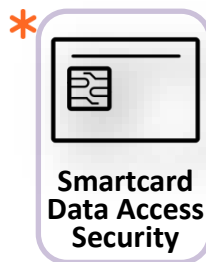
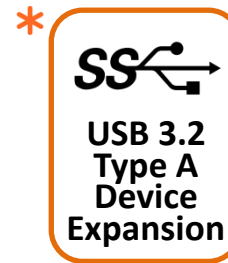
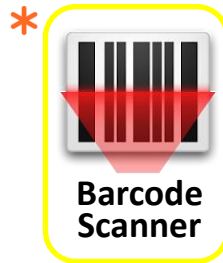
- **Regular Mode**
In this mode the battery will be fully charged.
- **Optimized Battery Charging (OBC)**
Battery charging will stop at 80% to reduce battery aging.
- **Temperature Control Mode (TCM)**
To extend the lifetime of the battery, charging is enhanced based on DURABOOK intelligent algorithm and battery temperature.
- **DURA² Charging (D2C)**
To maximize battery performance and lifespan, charging is enhanced based on DURABOOK intelligent algorithm and battery temperature. Battery charging will stop at 80%.



SPEAK ALL LANGUAGES

EXPANDABLE AND CONFIGURABLE I/O OPTIONS

* optional



INFINITE CUSTOMIZATION 1/2

VERSATILE BARCODE SCANNER. HIGH COMPATIBILITY.

The R8 can be installed with a barcode reader from **Honeywell**, which gives users the ability to scan all kinds of codes from multiple barcodes to QR codes.



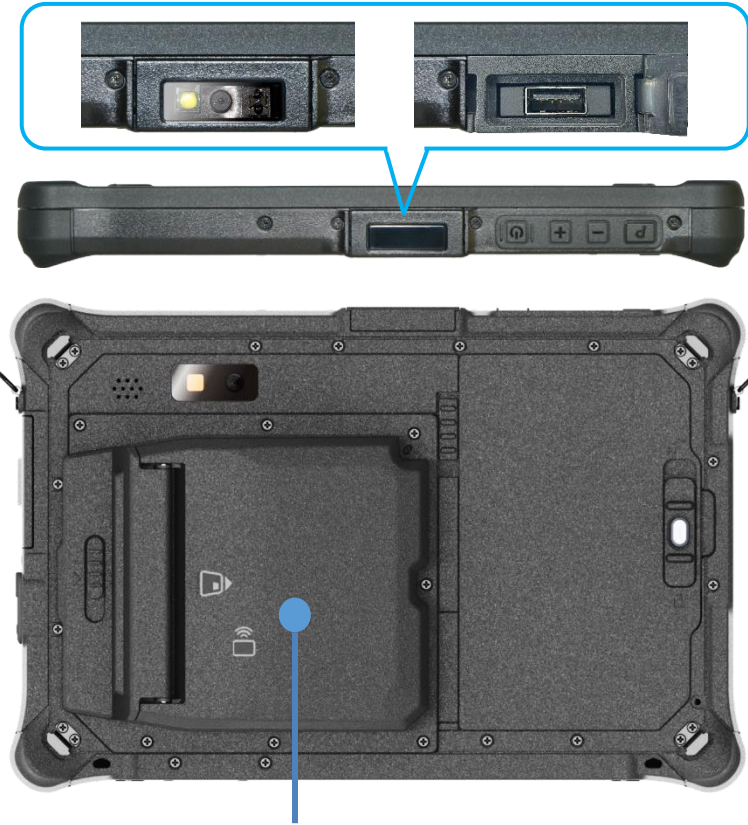
INFINITE CUSTOMIZATION 2/2

- R8 offers expansion modules for enhanced flexibility:
 - Barcode Reader or USB 3.2 Gen 1 (Type A)
 - RS-232/RJ-45/USB 3.2 Gen 1 (Type A) Module
 - Smart Card reader + UHF-RFID (NFC) Module
 - Smart Card reader + LF/HF-RFID (NFC) Module
- Other customized features available by request.



Barcode
Reader

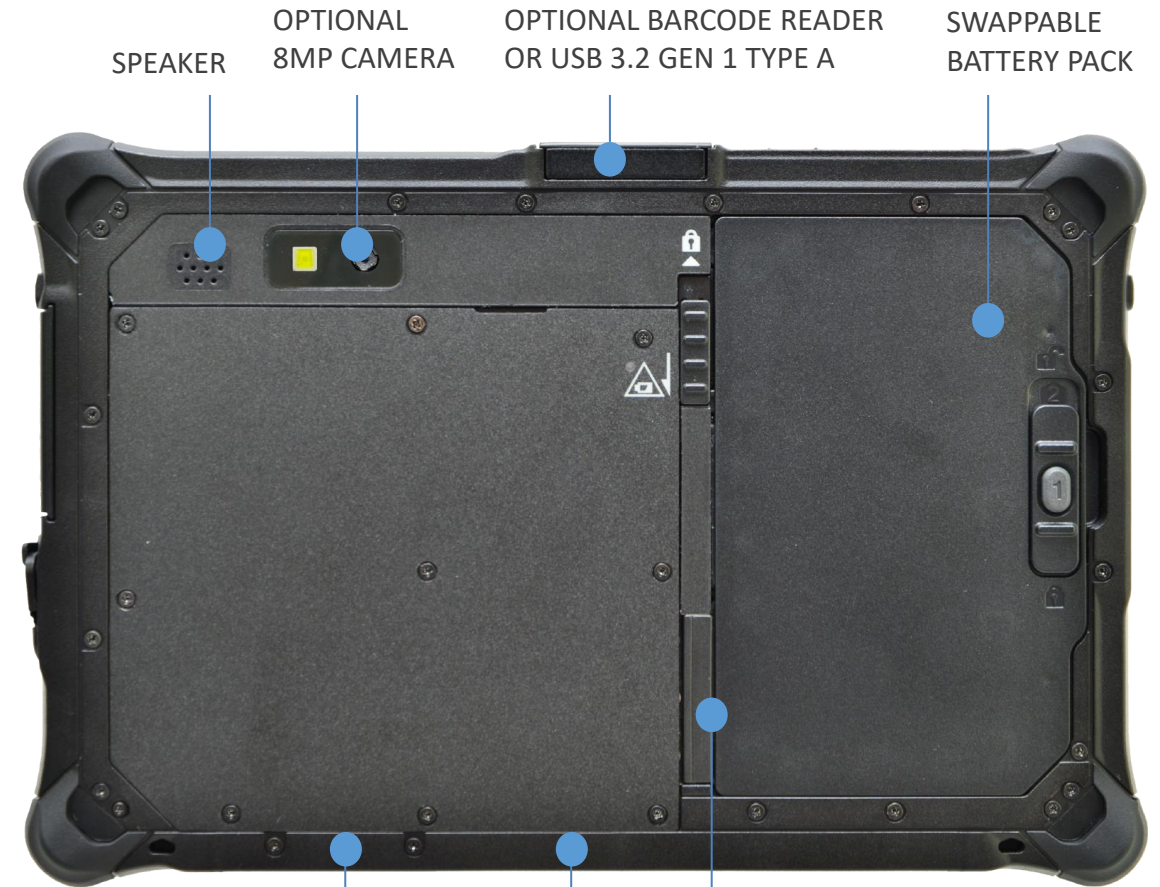
USB 3.2 Gen 1
Type A



Smart Card reader + RFID (NFC) or
RS-232/RJ-45/USB 3.2 Gen 1 combo module

R8 ANATOMY

◀ FRONT BACK ▶



OPTIONAL ANTENNA
PASS-THROUGH

DOCKING
CONNECTOR

NANO SIM CARD & MICRO SD

R8 ANATOMY

◀ LEFT RIGHT ▶



WHY DURABOOK

	DURABOOK R8	Market Solution A	Market Solution B	Market Solution C
MIL-STD	MIL-STD-810H certified 6' drop	MIL-STD-810H certified 6' drop	MIL-STD-810G certified 5' drop	MIL-STD-810G 3' drop (optional 6'')
EMC	MIL-STD-461G	MIL-STD-461G	N/A	N/A
IP	IP66	IP65	IP65	IP65
Display	8" LCD (800 x1280) 800 nits	8.1 "LCD (1280 x 800) 600nits	7" WXGA (1280 x 800) 700 nits	8.4" 720 nits
CPU	12th Generation CPU Pentium Gold 8500 Intel® Core™ i5-1230U up to 4.4 Ghz, vPro Intel® Core™ i7-1250U up to 4.7 Ghz, vPro	Intel® Atom Processor x7-Z8750 up to 2.56GHz	Intel® Core™ i5-7Y57 Processor up to 3.3 GHz	Intel Atom A3940 quad core 1.6 GHz up to 2.0 GHz
Graphic	Intel Iris® Xe Graphics	Intel® HD Graphics	Intel® HD Graphics 615	N/A
Storage	NVMe SSD / OPAL 2.0 SSD (128GB/256GB/512GB/1TB)	128GB/ 256GB eMMC	256 GB SSD	64 GB eMMC flash
RAM	8GB up to 16GB	4GB up to 8GB	8GB	4GB
I/O Interface	Default: USB 3.2, Thunderbolt 4, fully insertable Smart Card reader (optional)	Default: USB 3.2, Micro HDMI (optional: SIM card)	Default: Micro SDXC, USB 3.0 (optional RJ-45 or USB 2.0)	Type C
Wireless	- Intel 6E AX211 - Bluetooth V5.2 - Optional 4G LTE	- Intel® Wi-Fi AX200 - Bluetooth V5.2 - Optional 4G LTE	- Intel Dual Band Wireless AC 8265 - Bluetooth V4.2 - Optional 4G LTE	- Bluetooth V4.2 - Optional 4G LTE
Battery	8 hrs (up to 16 hrs)	Up to 10 hrs	8 hrs (up to 16 hrs)	N/A

Prepared
for
the Unexpected

DURABOOK