



**TOUGHBOOK**

For more information please visit  
[www.toughbook.eu](http://www.toughbook.eu)

Panasonic Connect Europe GmbH, Hagenauer Straße 43, 65203 Wiesbaden (Germany)



Active Matrix colour display conforms to industry standards. Some displays may contain isolated illuminated or dark pixels as an artefact of the manufacturing process (effective pixels: minimum 99.998%). RAM capacity calculated as follows: 1 MB = 1,048,576 bytes. HDD capacity calculated as follows: 1 GB = 1,000,000,000 bytes. TOUGHBOOK is a brand name and registered trademark of Panasonic Corporation. Google, the Google logo, YouTube and Android are trademarks of Google Inc. Intel, the Intel logo, Intel Core, and Intel vPro are trademarks of Intel Corporation or its subsidiaries. Microsoft® and Windows® are registered trademarks of Microsoft® Corporation of the United States and/or other countries. All other brand names shown are the registered trademarks of the relevant companies. All rights reserved. All working conditions, times and figures quoted are optimum or ideal levels and may differ as a result of individual and local circumstances. Technical specifications are subject to change without notice.

**TOUGHBOOK G2**  
\* Optional  
\*\* One option exclusive possible in Top Expansion Bay Area, needs to be decided at purchase  
\*\*\* One option exclusive possible in Rear Expansion Bay Area, End User replaceable  
\*\*\*\* Tested by an independent third party lab following MIL-STD-810H and IEC 60529, Sections 13.4, 13.6.2, 14.2.5 and 14.3

**TOUGHBOOK 33**  
\* Optional  
\*\* One option exclusive possible in configuration port / business expansion module  
\*\*\* Tested by an independent third party lab following MIL-STD-810H and IEC 60529, Sections 13.4, 13.6.2, 14.2.5 and 14.3

**TOUGHBOOK 40**  
\* Optional  
\*\* Exclusive Option, pre-configured or accessory  
\*\*\* Tested by an independent third party lab following MIL-STD-810H and IEC 60529

**TOUGHBOOK 55**  
\* Optional  
\*\* Exclusive Option, pre-configured or accessory  
\*\*\* Tested by an independent third party lab following MIL-STD-810H and IEC 60529

Panasonic and TOUGHBOOK are brand names and registered trademarks of Panasonic Corporation. Intel, the Intel logo, Intel Core, and Intel vPro are trademarks of Intel Corporation or its subsidiaries. Microsoft® and Windows® are registered trademarks of Microsoft® Corporation of the United States and/or other countries. All other brand names shown are the registered trademarks of the relevant companies. Android is a trademark of Google LLC. All rights reserved.

All working conditions, times and figures quoted are optimum or ideal levels and may differ as a result of individual and local circumstances.  
Panasonic Connect Europe GmbH, Hagenauer Straße 43, D-65203 Wiesbaden (Germany).

**Panasonic  
CONNECT**

**TOUGHBOOK**

**TOUGH** is  
setting the  
performance standard



Explore our range  
of rugged devices

Windows 11

Intel® Core™ i5 vPro® processor

**intel  
CORE**  
ULTRA 5

# Tablets



## TOUGHBOOK G2

10.1" fully rugged Windows tablet

## TOUGHBOOK 33

12" fully rugged Windows tablet

## TOUGHBOOK G2

10.1" fully rugged 2-in-1 detachable Windows tablet

## TOUGHBOOK 33

12" fully rugged 2-in-1 detachable Windows notebook

## TOUGHBOOK 40

14" fully rugged clamshell notebook

## TOUGHBOOK 55

14" rugged clamshell notebook

Mobile Computing Platform / CPU	Intel® Core™ i5-1245U vPro™ Processor or Intel® Core™ i7 1270P vPro™ Processor	Intel® Core™ i5-1245U vPro™ Processor or Intel® Core™ i7 1270P vPro™ Processor	Intel® Core™ i5-1245U vPro™ Processor or Intel® Core™ i7 1270P vPro™ Processor	Intel® Core™ i5-1245U vPro™ Processor or Intel® Core™ i7 1270P vPro™ Processor	Intel Core™ Ultra5 135H Processor (with Intel vPro Technology) Intel Core™ Ultra7 165H (with Intel vPro Technology) Processor optional	Intel® Core™ i5 1345U vPro™ Processor or Intel® Core™ i7 1370P vPro™ Processor			
Operating System	Windows 11 Pro	Windows 11 Pro	Windows 11 Pro	Windows 11 Pro	Windows 11 Pro	Windows 11 Pro			
Memory & Storage	16 GB DDR4 RAM (max. 32 GB) 512 GB OPAL NVMe SSD (up to 1 TB optional) with heater Quick Release SSD SKU optional	16 GB DDR4 RAM (max. 32 GB) 512 GB OPAL NVMe SSD (up to 2 TB optional) with heater	16 GB DDR4 RAM (max. 32 GB) 512 GB OPAL NVMe SSD (up to 1 TB optional) with heater Quick Release SSD SKU optional	16 GB DDR4 RAM (max. 32 GB) 512 GB OPAL NVMe SSD (up to 2 TB optional) with heater	16 GB DDR4 RAM (max. 64 GB) 512 GB NVMe OPAL SSD (max. 2 TB)	16 GB DDR4 RAM (max. 64 GB) 512 GB NVMe OPAL SSD (max. 2 TB) (with heater)			
Display	10.1" Active Matrix (TFT) colour LCD 1,920 x 1,200 (WUXGA) LCD with sunlight-viewable glove-enabled capacitive touchscreen (up to 1,000 cd/m <sup>2</sup> ), IP55 Digitiser	12.0" Active Matrix (TFT) colour LCD 2,160 x 1,440 (QHD) LCD with sunlight-viewable glove-enabled capacitive touchscreen (up to 1,200 cd/m <sup>2</sup> ), IP55 Digitiser	10.1" Active Matrix (TFT) colour LCD 1,920 x 1,200 (WUXGA) LCD with sunlight-viewable glove-enabled capacitive touchscreen (up to 1,000 cd/m <sup>2</sup> ), IP55 Digitiser	12.0" Active Matrix (TFT) colour LCD 2,160 x 1,440 (QHD) LCD with sunlight-viewable glove-enabled capacitive touchscreen (up to 1,200 cd/m <sup>2</sup> ), IP55 Digitiser	12.0" Active Matrix (TFT) colour LCD 2,160 x 1,440 (QHD) LCD with sunlight-viewable glove-enabled capacitive touchscreen (up to 1,200 cd/m <sup>2</sup> ), IP55 Digitiser	14" Active Matrix (TFT) IPS colour LCD 1,920 x 1,080 pixels, Full-HD (up to 1,200 cd/m <sup>2</sup> ) Anti reflection with Auto glove and rain modes 10 finger capacitive touchscreen	HD model: 14" Active Matrix (TFT) colour LCD 1,366 x 768 pixels Full-HD Touch model: 14" Active Matrix (TFT) colour LCD 1,920 x 1,080 pixels, capacitive 10 finger Touch Screen, up to 1,000 cd/m <sup>2</sup> brightness		
Camera	Front: 2 MP with IR / privacy shutter (Windows Hello compliant) Rear: 8 MP with autofocus and LED flash	Front: 2 MP with IR / privacy shutter (Windows Hello compliant) Rear: 8 MP with autofocus and LED flash	Front: 2 MP with IR / privacy shutter (Windows Hello compliant) Rear: 8 MP with autofocus and LED flash	Front: 2 MP with IR / privacy shutter (Windows Hello compliant) Rear: 8 MP with autofocus and LED flash	5 MP with IR / privacy shutter (Windows Hello compliant) optional	HD: 2 MP with IR / privacy shutter (Windows Hello compliant) optional Full-HD touch model: 2 MP with IR / privacy shutter (Windows Hello compliant)			
Expansion Slots	Top Expansion Bay Area**: Serial, 2D Barcode Reader, 2nd USB 2.0, 2nd LAN, Thermal by FLIR, Micro-SD Rear Expansion Bay Area***: Smart Card Reader, HF-RFID (NFC), Fingerprint Reader	Configuration port (Tablet)**: Serial, 2D Barcode Reader, 2nd USB 2.0 Business Expansion Module (Tablet)**: Smart Card Reader, HF-RFID (NFC), Fingerprint Reader	Top Expansion Bay Area**: Serial, 2D Barcode Reader, 2nd USB 2.0, 2nd LAN, Thermal by FLIR, Micro-SD Rear Expansion Bay Area***: Smart Card Reader, HF-RFID (NFC), Fingerprint Reader	Configuration port (Tablet)**: Serial, 2D Barcode Reader, 2nd USB 2.0 Business Expansion Module (Tablet)**: Smart Card Reader, HF-RFID (NFC), Fingerprint Reader	Left Expansion Area** 2nd SSD, Smart Card Reader, DVD Multi Drive, Blu Ray Drive Right Expansion Area** 2nd Battery, Smart Card Reader Rear Expansion Area** VGA + True Serial (RS232) + 2nd native GLAN, USB 3.1 Type A + True Serial (RS232) + 2nd HDMI, USB 3.1 Type A + USB 3.1 Type A + 2nd HDMI, USB 3.1 Palm Rest Expansion Area** Fingerprint reader (Windows Hello) Fingerprint reader (Windows Hello, Multi-user authentication) HF-RFID (NFC)	TOUGHBOOK Universal Bay**: 2nd SSD, Smart Card Reader, DVD Multi Drive, Blu Ray Drive Front Expansion Slot**: 2nd Battery, Fingerprint Reader, HF-RFID (NFC), Smart Card Reader Rear Expansion Slot**: VGA + True Serial + 4th USB 3.2, VGA + True Serial + 2nd native GLAN, VGA + True Serial + Rugged USB 2.0, 4th USB 3.2 + USB Type C			
Interfaces	USB 3.2 Type A: x1 Thunderbolt 4: x1 LAN: x1 Headset: x1 DC In: x1 Port Replicator: x1 Dual Antenna Connector: x1	USB 3.2 Type A: x1 Thunderbolt 4: x1 USB 2.0**: x1 HDMI: x1 LAN: x1 Native Serial Port**: x1 Headset: x1 DC In: x1 Port Replicator: x1 Dual Antenna Connector: x1	USB 3.2 Type A: x1 (x1 Tablet, x1 Keyboard) USB 3.2 Type C: x1 Thunderbolt 4: x1 LAN: x1 Headset: x1 DC In: x1 Port Replicator: x1 Dual Antenna Connector: x1	SD/SDXC Memory Card: x1 (Keyboard) USB 3.2 Type A: x3 (x1 Tablet, x2 Keyboard) Thunderbolt 4: x1 USB 2.0: x1 optional (Tablet)** x1 (Keyboard) HDMI: x1 (Tablet) x1 (Keyboard) VGA: x1 (Keyboard)	LAN: x1 (Tablet), x1 (Keyboard) x1 (Keyboard) Native Serial Port: x1 optional (Tablet)** x1 (Keyboard) Headset: x1 (Tablet) x1 (Keyboard) DC In: x2 (Tablet + Keyboard) Port Replicator: x1 (Keyboard) Dual Antenna Connector: x1 (Keyboard) Business Expansion Module**: Smart Card Reader, NFC, Fingerprint Reader	USB 3.2 Type-A: x2 Thunderbolt 4: x1 Micro SDXC Memory Card: x1 HDMI: x1	Headset: x1 DC In: x1 Port Replicator: x1 Quad Path Through Connector: x1	Micro SDXC Memory Card: x1 USB 3.2 Type A: x2 Thunderbolt 4: x1 HDMI: x1	LAN: x1 Headset: x1 DC In: x1 Port Replicator*: x1 Dual Path Through Connector*: x1
Connectivity	Bluetooth®: 5.1 + EDR Class 1 Intel® Wi-Fi 6E AX211 LAN: IEEE 802.3 10Base-T / IEEE 802.3u 100BASE-TX / IEEE 802.3ab 1000BASE-T 4G or 5G with eSIM support optional Dedicated GPS optional	Bluetooth®: Version 5.1 + EDR Class 1 Intel® Wi-Fi 6E AX211 LAN: IEEE 802.3 10Base-T / IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T 4G or 5G with eSIM support optional Dedicated GPS optional	Bluetooth®: 5.1 + EDR Class 1 Intel® Wi-Fi 6E AX211 LAN: IEEE 802.3 10Base-T / IEEE 802.3u 100BASE-TX / IEEE 802.3ab 1000BASE-T 4G or 5G with eSIM support optional Dedicated GPS optional	Bluetooth®: 5.1 + EDR Class 1 Intel® Wi-Fi 6E AX211 LAN: x2 IEEE 802.3 10Base-T / IEEE 802.3u 100BASE-TX / IEEE 802.3ab 1000BASE-T (Tablet + Keyboard) 4G or 5G with eSIM support optional Dedicated GPS optional	Bluetooth® 5.3 Class 1 Wireless LAN Intel® Wi-Fi 7 BE200 LAN: IEEE 802.3 10Base-T / IEEE 802.3u 100BASE-TX / IEEE 802.3ab 1000BASE-T 4G or 5G with eSIM support optional Dedicated GPS optional	Bluetooth®: 5.3 Class 1 Intel® Wi-Fi 6E AX211 LAN: IEEE 802.3 10Base-T / IEEE 802.3u 100BASE-TX / IEEE 802.3ab 1000BASE-T (2nd GLAN optional) 4G or 5G with eSIM support optional Dedicated GPS optional			
Power	AC Adapter: 100 – 240 V AC, 50/60 Hz, Output: 15.6 V DC, 7.05 A Standard: Li-ion 11.4 V, 4,360 mAh (50 Whr) Standard Battery Life: Approx. 7.5 hours (Mobile Mark™ 25) Extended: Li-ion 10.8 V, 6,300 mAh (68 Whr) Extended Battery Life: Approx. 12 hours (Mobile Mark™ 25)	AC Adaptor: Input: 100 – 240 V AC, 50/60 Hz, Output: 15.6 V DC, 7.05 A Standard: x2 Li-Ion (3 cell, 22 Whr) Standard Battery Life: Approx. 7 hours (Mobile Mark™ 25) Extended: x2 Li-Ion (6 cell, 45 Whr)* Extended Battery Life: Approx 14.5 hours (Mobile Mark™ 25)	AC Adaptor: Input: 100 – 240 V AC, 50/60 Hz, Output: 15.6 V DC, 7.05 A Standard: Li-Ion 11.4 V, 4,360 mAh (50 Whr) Standard Battery Life: Approx. 7 hours (Mobile Mark™ 25) Extended: Li-Ion 10.8 V, 6,300 mAh (68 Whr) Extended Battery Life: Approx. 11.5 hours (Mobile Mark™ 25)	AC Adaptor: Input: 100 – 240 V AC, 50/60 Hz, Output: 15.6 V DC, 7.05 A Standard: x2 Li-Ion (3 cell, 22 Whr) Battery Life: Approx 6.5 hours (Mobile Mark™ 25) Extended: x2 Li-Ion (6 cell, 45 Whr)* Battery Life: Approx 14 hours (Mobile Mark™ 25)	AC Adaptor: Input: 100 – 240 V AC, 50/60 Hz, Output: 15.6 V DC, 7.05 A Standard: x2 Li-Ion (3 cell, 22 Whr) Battery Life: Approx 6.5 hours (Mobile Mark™ 25) Extended: x2 Li-Ion (6 cell, 45 Whr)* Battery Life: Approx 14 hours (Mobile Mark™ 25)	AC Adapter Input: 100 – 240 V AC, 50/60 Hz, Output: 15.6 V DC, 7.05 A Battery Lithium-Ion 10.8 V, 6,500 mAh (typ.), 6,300 mAh (min.) Battery Life Approx. 12 hours (Mobile Mark™ 25) Approx: 24 hours with 2nd battery (Mobile Mark™ 25) Power Management Standby function, ACPI BIOS Hot Swap* with 2nd Battery	AC Adaptor: Input: 100 – 240 V AC, 50/60 Hz, Output: 115.6 V DC, 7.05 A Battery: Lithium-Ion 10.8 V, 6,500 mAh (typ.), 6,300 mAh (min.) Battery Life: Approx. 10 hours (Mobile Mark™ 25) Battery Life: Approx. 20 hours with 2nd battery (Mobile Mark™ 25) Hot swap* with 2nd Battery		
Security Features	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot Microsoft Windows 11 Secured-core PC	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot Microsoft Windows 11 Secured-core PC	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot Microsoft Windows 11 Secured-core PC	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot Microsoft Windows 11 Secured-core PC	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot Microsoft Windows 11 Secured-core PC	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot Microsoft Windows 11 Secured-core PC	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot Microsoft Windows 11 Secured-core PC		
Dimensions (W x H x D) & Weight	279 x 188 x 23.5 mm / 11.0 x 7.4 x 1.0" (without protruding parts) Approx. 1.19 kg / 2.64 lb	Standard Battery: 308.0 x 243.6 x 21.6 mm / 12.1 x 9.6 x 0.9" (without protruding parts) Approx. 1.54 kg / 3.4 lb Extended Battery: 308.0 x 243.6 x 32.1 mm / 12.1 x 9.6 x 1.3" (without protruding parts) Approx. 1.9 kg / 4.1 lb	287 x 235 x 52.7mm / 11.3 x 9.3 x 2.1" (without protruding parts) Approx. 2.1 kg / 4.62 lb	Standard Battery: 313.0 x 288.4 x 46.1 mm / 12.3 x 11.4 x 1.8" (without protruding parts) Approx. 2.81 kg Extended Battery: 313.0 x 288.4 x 56.6 mm / 12.3 x 11.4 x 2.2" (without protruding parts) Approx. 3.14 kg	Standard Battery: 313.0 x 288.4 x 46.1 mm / 12.3 x 11.4 x 1.8" (without protruding parts) Approx. 2.81 kg Extended Battery: 313.0 x 288.4 x 56.6 mm / 12.3 x 11.4 x 2.2" (without protruding parts) Approx. 3.14 kg	354 x 301 x 54.4 mm (without protruding parts) Approx. 3.375 kg	345 x 272 x 32.8 mm (without protruding parts) HD model: Approx. 2.08 kg Full-HD touch model: Approx. 2.22 kg		
Ruggedisation	Water Resistance: IEC529 (JIS C0920) IPx5*** Dust Resistance: IEC529 (JIS C0920) IP6x*** Drop Resistance: MIL-STD 810H, 180 cm*** Operating Temperature: MIL-STD 810H, -29 to 60 °C***	Water Resistance: IEC529 (JIS C0920) IPx5*** Dust Resistance: IEC529 (JIS C0920) IP6x*** Drop Resistance: MIL-STD 810H, 150 cm*** Operating Temperature: MIL-STD 810H, -29 to 60 °C***	Water Resistance: IEC529 (JIS C0920) IPx5*** Dust Resistance: IEC529 (JIS C0920) IP6x*** Drop Resistance: MIL-STD 810H, 180 cm*** Operating Temperature: MIL-STD 810H, -29 to 60 °C***	Water Resistance: IEC529 (JIS C0920) IPx5*** Dust Resistance: IEC529 (JIS C0920) IP6x*** Drop Resistance: MIL-STD 810H, 150 cm*** Operating Temperature: MIL-STD 810H, -29 to 60 °C***	Water Resistance: IEC529 (JIS C0920) IPx5*** Dust Resistance: IEC529 (JIS C0920) IP6x*** Drop Resistance: MIL-STD 810H, 150 cm*** Operating Temperature: MIL-STD 810H, -29 to 60 °C***	Water resistance: IEC529 (JIS C0920) IPX6*** Dust resistance: IEC529 (JIS C0920) IP5X*** Drop Resistance: MIL-STD 810H, 180 cm*** Operating temperature: MIL-STD 810H, -29 to +60 °C***	Water resistance: EC529 (JIS C0920) IPX3 *** Dust resistance: IEC529 (JIS C0920) IP5X*** Drop Resistance: MIL-STD 810H, 150 cm*** Operating temperature: MIL-STD 810H, -29 to +60 °C***		