



## TOUGHBOOK G2

- Innovative modular design with three expansion bay areas including a new quick-release SSD
- Backward compatible with most TOUGHBOOK G1 and 20 docks<sup>1</sup>
- Infrared webcam and Windows Hello enables biometric user authentication
- Quick-release SSD expansion with 512GB or 1TB OPAL SSD
- Optional bridge battery enables hot-swap battery replacement for continuous use
- Optional 5G with Sub-6 & mmWave (EM9190) or 4G LTE (EM7511)

## 10" TABLET EASILY CONVERTS TO A LAPTOP WITH OPTIONAL KEYBOARD.

Panasonic has pioneered the TOUGHBOOK G2, a groundbreaking modular product design that has three expansion areas offering 36 different combinations to deliver the ultimate computing experience. The TOUGHBOOK G2 is the evolution of two top-selling TOUGHBOOK products; it features a 2-in-1 design and keeps backward compatibility to most docks<sup>1</sup> making it possible for customers to upgrade technology while reusing existing mounting hardware. Network capabilities are also enhanced with cellular options of 4G LTE or 5G that has both sub-6 and mmWave. With a keyboard option and single 18.5 hour battery, it is aimed at professionals who need a rugged, yet versatile, device they can rely on in a wide range of challenging work environments.

MIL-STD-  
810H<sup>2</sup>

MIL-STD-  
461G

IP65

C1D2<sup>3</sup>  
HAZ LOC

## SOFTWARE

- Windows® 10 Pro 64-bit
- Panasonic Utilities and Recovery Partition
- Enterprise ready driver packages including CAB files and one-click driver bundles

## CERTIFICATIONS AND DURABILITY

- Designed to meet MIL-STD-810H<sup>2</sup>
- MIL-STD-461G
- IP65
- Optional ANSI hazardous location C1D2<sup>3</sup> (class 1 div 2) groups ABCD
- Magnesium alloy chassis encased with ABS and elastomer edges
- Built-in dual purpose handle & kickstand (on optional keyboard)
- Solid state drive heater
- Quick-release storage drive
- Removable battery
- Optional rotating hand strap
- Reinforced locking port covers
- Raised bezel for LCD impact protection
- Replaceable screen protector

## CPU

- Intel® Core™ i5-10310U vPro™ processor – 1.7GHz with Turbo Boost up to 4.4GHz, 6MB cache
- Intel® Core™ i7-10810U vPro™ processor – 1.1GHz with Turbo Boost up to 4.9GHz, 12MB cache

## STORAGE &amp; MEMORY

- Factory installed 16GB or 32GB RAM (DDR4)<sup>4</sup>
- 512GB or 1TB Quick-release OPAL NVMe SSD with heater<sup>4</sup>

## DISPLAY

- 10.1" WUXGA 1920 x 1200
  - Capacitive gloved multi touch + digitizer
- Direct bonding
- 2-1000 NIT
- Anti-reflective (AR) screen treatment
- Intel UHD Graphics
- Supports up to 5 monitors
- Concealed Mode; Day/Night Mode

## AUDIO

- Integrated dual array microphone
- Intel® High Definition Audio compliant
- Integrated 88db speakers (front-facing)
- On-screen and button volume and mute controls

## CAMERAS

- 1080p webcam w/privacy cover & dual array mic
  - Infrared with Windows Hello support
- 8MP rear camera with autofocus with LED flash
- Optional thermal camera (FLIR Lepton 3.5)<sup>5</sup>

## KEYBOARD &amp; INPUT

- IP55 2 button digitizer pen (right click & erase), stylus holder, tether and cleaning cloth
- Supports glove mode and rain mode
- 8 tablet buttons (6 user-definable including A1/A2/A3 buttons)
- On-screen QWERTY keyboard
- Optional emissive keyboard and rubber keyboard:
  - Backlit (color-selectable) with 4 adjustable levels
  - 82-key with dedicated Windows® key
  - Pressure-sensitive touchpad with multi touch

## INTERFACE

- On the tablet:
  - USB-C 10Gbps (w/PD)
  - USB-A 5Gbps
  - Optional 2nd USB-A 0.5Gbps<sup>5</sup>
  - 1Gbps Ethernet RJ-45
  - Optional True Serial Dongle D-sub 9-pin<sup>5</sup>
  - Dual SIM (Nano-SIM 4FF x1, eSIM x1)
- On the optional keyboard:
  - Docking Connector 24-pin
  - USB-C 5Gbps
  - USB-A 5Gbps

## WIRELESS

- Optional (Band 14 EM7511)
- 4G LTE-A multi carrier w/satellite GPS
  - AT&T, FirstNet™, Verizon
  - CBRS Band 48 compatible<sup>6</sup>
- Optional dedicated GPS (u-blox NEO M8N)
- Dual high-gain antenna pass-through
- Intel® Wi-Fi 6 AX201
- Bluetooth® v5.1 (Class 1)
- Airplane mode Fn key (on optional keyboard)
- Optional Band Sierra wireless EM9190 module, Full 5G Sub-6 and mmWave
  - Certified for AT&T, FirstNet ready (Band 14), Verizon
  - CBRS Band 48 Capable
  - Integrated GNSS receiver

## SECURITY FEATURES

- Intel® Hardware Shield
- Secured-core PC
- TPM v.2.0
- NIST BIOS compliant
- Persistence® technology by Absolute embedded in BIOS<sup>7</sup>
- Kensington cable lock slots x2 (on tablet and optional keyboard)
- Optional insertable SmartCard CAC reader<sup>8</sup>
- Optional contactless SmartCard CAC reader 13.56MHz (ISO 14443 A/B compliant)<sup>8</sup>

## POWER

- Li-Ion battery:
  - 18.5 hours<sup>9</sup>
  - 10.8V, 6300mAh
- Optional bridge battery: 1 minute hot swap time
- Battery charging time: 3 hours
- AC Adapter: AC 100V-240V 50/60Hz, Auto Sensing/Switching worldwide power supply

## DIMENSIONS &amp; WEIGHT

- 11.0" x 7.4" x 1.1" (tablet only)<sup>10</sup>
- 2.9 lbs. (4.9 lbs. with optional keyboard)

## WARRANTY

- 3-year limited warranty, parts and labor

## INTEGRATED OPTIONS

- 4G LTE multi carrier with satellite GPS (Band 14 EM7511)
- 5G sduB-6 & mmWave EM9190
- Dedicated GPS (u-blox NEO-M8N)
- Top Expansion Area: 1D/2D Barcode Reader (N6603), Thermal Camera, 2nd USB-A, 2nd LAN, True Serial Dongle
- Rear Expansion Area: Insertable SmartCard CAC or Contactless SmartCard CAC Reader<sup>8</sup>
- SSD Expansion Area: Choice of 512GB OPAL SSD or 1TB OPAL SSD
- Optional emissive keyboard

## xPAK's

- Top Expansion Area
  - Barcode Reader.....FZ-VBRG211U
  - 2nd USB-A.....FZ-VUBG211U
  - 2nd LAN.....FZ-VLNG211U
  - True Serial Dongle.....FZ-VSRG211U
  - Thermal Camera.....FZ-VTSG211U
- Rear Expansion Area
  - Insertable SmartCard.....FZ-VSCG211U
  - Contactless SmartCard.....FZ-VRFG211U
- SSD Expansion Area
  - 512GB OPAL SSD.....FZ-VSDG25121
  - 1TB OPAL SSD.....FZ-VSDG21T21

## Please consult your reseller or Panasonic representative to learn more about the TOUGHBOOK G2 and the wide variety of accessories and services offered.

- 1 Not compatible with vehicle docks 7160-0595-00-P, 7160-0595-02-P, GJ-A2-TVD2-S, GJ-A2-TVC-S, GJ-A2-TVD0-S.
- 2 In process of being tested by national independent third party lab following MIL-STD-810H Method 516.8 Procedure IV for transit drop test.
- 3 In process of being tested.
- 4 1GB = 1,000,000,000 bytes. Total usable memory will be less depending upon actual system configuration.
- 5 Barcode Reader, Thermal Camera, 2nd USB-a, 2nd LAN, True Serial Dongle xPAK's are mutually exclusive.
- 6 The module firmware and the device antenna system have obtained technical approval by commercial carriers in the US. It is customer's responsibility to assure that the module firmware and the device antenna system are compatible with the customer's Private LTE network using Band 48.
- 7 Requires software and activation to enable theft protection.
- 8 Insertable SmartCard CAC Reader and Contactless SmartCard CAC Reader are mutually exclusive
- 9 Battery performance features such as charge time and life span can vary according to the conditions under which the computer and battery are used. Battery operation and recharge times will vary based on many factors, including screen brightness, applications, features, power management, battery conditioning and other customer preferences. Battery testing results from MobileMark 2014 at 150 nit and using no cellular mobile broadband.
- 10 Tablet with keyboard option is 11.3"x9.3"x2.1".