Panasonic recommends Windows.

TOUGHBOOK 20

- 10.1” fully rugged PC for use as a laptop or tablet
- Infrared webcam and Windows Hello enables biometric user authentication
- Optional quick-release SSD includes insertable SmartCard CAC reader
- Bridge battery enables hot-swap battery replacement for continuous use
- Integrated 2nd battery, CAC SmartCard, fingerprint, magstripe, barcode options and more
- Optional FirstNet Ready™ EM7511 Band 14 mobile broadband

THE WORLD’S FIRST FULLY RUGGED DETACHABLE LAPTOP.

The TOUGHBOOK 20 is the first fully rugged detachable PC with a removable keyboard that quickly transforms from a laptop into a fully functioning tablet with just one hand. At only 3.9 pounds, it's good on the go with a clever built in handle that also functions as a kickstand, a bridge battery that allows hot swappable battery replacement while running without disruption and the broadest range of ports and integrated options in its class including optional FirstNet Ready™ CF-20 EM7511 Band 14 mobile broadband. The TOUGHBOOK 20 display can be used with or without gloves and its sunlight-viewable 800 nit IPS display with direct bonding enables wider viewing angles and richer colors.

1.800.662.3537
na.panasonic.com/us/TOUGHBOOK20
Panasonic recommends Windows.

SOFTWARE
- Panasonic Utilities (Including Dashboard), Recovery Partition
- Enterprise ready driver packages including CAB files and one-click driver bundles
- Windows® 10 Pro 64-bit

DURABILITY
- MIL-STD-810G certified (4’ drop - 5 tablet only, shock, vibration, rain, dust, sand, altitude, freeze/thaw)
- High/low temperature, temperature shock, solar radiation, salt fog, humidity, explosive atmosphere
- IP65 certified sealed all-weather fanless design
- Optional hazardous location class I division 2, groups A/B/C/D and E/F/G
- Reinforced locking port covers
- Optional rotating hand strap
- Raised bezel for LCD impact protection
- Preinstalled replaceable screen film for LCD protection

CPU
- Intel® Core™ i7-7500U® processor (7th Gen CPU) 2.7GHz with Turbo Boost up to 3.5GHz
- 4MB cache

STORAGE & MEMORY
- Factory installed 8GB or 16GB DDR4 UDIMM (LPDDR4-2400MT/s)3
- 256GB or 512GB SSD with heater
- Optional quick-release SSD (SSD only)
- Optional OPAL encrypted SSD with heater

DISPLAY
- 10.1” WXGA 1920 x 1200
- 10-point capacitive gloved multi touch + digitizer
- 2.880 nit
- IPS display with direct bonding
- Anti-reflective (AR) and anti-glare (AG) screen treatments
- Narrow bezel with 85% screen-to-volume ratio
- On-screen button volume and mute controls

KEYBOARD & INPUT
- Intel® High Definition Audio compliant
- Integrated speaker
- On-screen button volume and mute controls

CAMERAS
- 8MP rear camera with autofocus and triple LED flash
- On the tablet:
  - Pressure-sensitive touchpad with multi touch

INTERFACE & EXPANSION
- On the tablet:
  - USB 3.0 x1 (optional 2nd USB 2.0) Type A (USB 3.0 is 5Gbps)
  - MicroSDXC
  - 10/100/1000 Ethernet RJ-45
  - Audio In/Out (3.5mm Mini-jack stereo)
  - SIM 1
- On the keyboard:
  - Docking Connector
  - USB 3.0 x2, USB 2.0 x1
  - SDHC
  - HDMI Type A
  - VGA
  - RJ-45
  - Internal 10/100/1000 Ethernet RJ-45
  - USB (4)

WIRELESS
- Optional 4G LTE-A multi-carrier mobile broadband w/satellite GPS5
- Certified with AT&T, FirstNet™, Verizon, Sprint
- Optional dedicated GPS (u-blox NEO M8N)
- Dual high-gain antenna pass-through
- Intel® Dual Band Wireless-AC 8265 Wi-Fi 802.11a/b/g/n/ac
- Dual high-gain antenna pass-through
- Intel® BRENTWOOD Wireless-A: 802.11a/b/g/n/ac
- Bluetooth® v4.1 (Class 1) + EDR

POWER
- Li-ion battery pack:
  - Standard on tablet, optional 2nd battery in keyboard
  - 11.4V, 2600mAh (each battery)
- Battery operation:
  - 8.5 hours (17 hours with opt. 2nd battery)5
  - Battery charging times: 3 hours (3.5 hours with opt. 2nd battery)
- Bridge battery: 1 minute hot swap time
- AC Adapter: AC 100V-240V 50/60Hz, auto sensing/switching worldwide power supply

SECURITY FEATURES
- TPM v2.0
- NIST 800-140 compliant
- Persistence® technology by Absolute embedded in BIOS5
- Kensington cable lock slot x2 (on tablet and keyboard)
- Optional fingerprint reader
- Optional instant-on Smartcard CAC reader7
- Optional contactless Smartcard CAC reader7
- 13.56MHz (ISO 14443 A/B) compliant

WARRANTY
- 2-year limited warranty, parts and labor

DIMENSIONS & WEIGHT
- 10.1” L x 7.9” W x 1.3” (30)(4)
- 3.9 lbs

HAZARDOUS LOCATION CERTIFICATIONS
- ANSI/ISA 2.1-1.01-2013
- Optional class I division 2, groups A/B/C/D certified model

INTEGRATED OPTIONS
- Choice of 4G LTE multi-carrier mobile broadband with satellite GPS
- Dedicated GPS (u-blox NEO M8N) or second USB 2.0 port
- Choice of tablet of magstripe, instant-on Smartcard CAC or contactless Smartcard CAC or fingerprint reader or quick-release SSD (comes with instant-on Smartcard CAC/SSD)

SELECT ACCESSORIES
- AC Adapter Standard 65W (3-prong) CF-AA4A1CM
- AC Adapter MIL-STD 441F (3-prong) CF-AA7113M
- Battery Pack CF-VZSU90W
- 6-Bay Battery Charger CF-VZB209T
- LIND Car Charger 120W CF-VEB201U
- Laptop Desktop Dock CF-VST2013U
- Shoulder Strap, Screen Cover, and Rotating Hand Strap5
- Laptop Desktop Dock CF-VST2021U
- Tablet Capsule Case CF-VB201U
- Tablet Drop Case5 CF-VB202U
- Rotating Hand Strap11 CF-VST2011U
- Shoulder Strap, Screen Cover, and Rotating Hand Strap5
- Prestige 10” LCD Protector Film CF-VP35FU
- ToughMate Always-on Case TBC20AOCS-P
- ToughMate Mobility Bundle (Carry Strap + Shoulder Strap, Screen Cover, and Rotating Hand Strap) CF-VST202U

Please consult your reseller or Panasonic representative before purchasing.

1 Tested by national independent third party sub following MIL-STD-810G Method 516.6 Procedure IV for transit drop test and IEC 60529 Sections 13.4, 13.6.2, 14.2.5 and 14.3 for IP65. 461F requires CF-AA5713AM.
2 1GB = 1,000,000,000 bytes. Total usable memory will be less depending upon actual system configuration.
3 Barcode, Serial (true) and 2nd USB 2.0 Port are mutually exclusive.
4 Magstripe, Serial, 2nd USB, Barcode+Insertable SmartCard or Quick-release SSD integrated options increase overall height and prohibit use in convertible mode.
5 Dedicated GPS and 4G LTE are mutually exclusive.
6 Battery testing results from MobileMark 2014 at 150 nit and no cellular mobile broadband.
7 Requires software and activation to enable theft protection.
8 Magstripe, Serial, 2nd USB, Barcode+Insertable SmartCard or Quick-release SSD (comes with instant-on Smartcard CAC/SSD)
9 Choice on tablet of 1D/2D capable barcode reader (N6603), serial (true), or second USB 2.0 port
10 Includes tablet and keyboard with handle. Tablet when detached is 2.1 lbs. Optional 2nd battery weighs 0.4 lbs.
11 Persistence® technology by Absolute embedded in BIOS5

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