



# Panasonic Toughbook 33 Rugged Two-in-One

**PRODUCT SPECIFICATIONS** 

#### **FULLY RUGGED**

- Designed for MIL-STD-810G (drop, shock, vibration, rain, dust, sand, altitude, freeze/thaw, high/low temperature, temperature shock, humidity, explosive atmosphere)
- Designed for MIL-STD-461F
- IP65 sealed all-weather design
- Magnesium alloy chassis encased with ABS and elastomer edges
- · Reinforced locking port covers
- Raised bezel for LCD impact protection
- Preinstalled replaceable screen film for LCD protection

## **OPERATING SYSTEM & PROCESSOR**

- Windows® 10 Pro 64-bit
  - Intel® Core™ i5-7300U vPro™ processor 3MB cache,
    2.6GHz up to 3.5GHz with Intel® Turbo Boost
  - Intel® Core™ i7-7600U vPro™ processor 4MB cache,
    2.8GHz up to 3.9GHz with Intel® Turbo Boost
- Windows® 10 Pro with Windows 7 Professional 64-bit downgrade
  - Intel® Core™ i5-6300U vPro™ processor 3MB cache,
    2.4GHz up to 3.0GHz with Intel® Turbo Boost
  - Intel® Core™ i7-6600U vPro™ processor 4MB cache,
    2.6GHz up to 3.4GHz with Intel® Turbo Boost

## **MEMORY & STORAGE**

- Factory installed 8GB or 16GB SDRAM (LPDDR3 1866MT/s
- 256GB or 512GB removable solid state drive with heater
- Optional OPAL encrypted solid state drive with heater

# DISPLAY

- 12.0" 3:2 QHD 2160 x 1440 10-point capacitive gloved multi touch + digitizer
- 2-1200 nit
- Direct bonding
- · Anti-reflective (AR) screen treatment
- Intel HD Graphics 620 (520 on i5-6300U and i7-6600U models)
- 4 monitor support (with Premium Keyboard)
- Concealed mode (configurable)

# INTEGRATED COMMUNICATIONS

- Optional 4G LTE-Advanced multi carrier mobile broadband with satellite GPS
- 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
- Bluetooth® v4.1 (Class 1) + EDR

# **INTEGRATED OPTIONS**

- 4G LTE-Advanced multi carrier mobile broadband with satellite GPS
- Dedicated GPS (u-blox NEO-M8N)
- Choice on tablet of 1D/2D capable barcode reader (N6603), serial (true), or second USB 2.0 port
- Choice on tablet of insertable SmartCard CAC, contactless SmartCard CAC or fingerprint reader

## **PORTS**

- On the tablet:
  - Docking Connector 25-pin
  - USB 3.0 x1 (optional 2nd USB 2.0) Type A (USB 3.0 is 1.5A)
  - MicroSDXC UHS-I HDMI Type A
  - 10/100/1000 Ethernet RJ-45
  - Optional Serial (True)12 D-sub 9-pin
  - Audio In/Out 3.5mm Mini-jack stereo
  - Nano-SIM 4FF
- On the Premium Keyboard:
  - Docking Connector 25-pin
  - USB 3.0 x2, USB 2.0 x1 Type A
  - SDXC UHS-II
  - HDMI Type A
  - VGA D-sub 15-pin
  - 10/100/1000 Ethernet RJ-45
  - Serial (USB) D-sub 9-pin

## **CAMERAS**

- 1080p webcam with dual array mic and camera on/off indicator – Infrared with Microsoft Hello support
- 8MP rear camera with autofocus and triple LED flash

#### **AUDIO**

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

## **KEYBOARD & INPUT**

- Waterproof IP55 stylus pen with integrated stylus holder, tether and cleaning cloth
- Supports glove mode and rain mode
- 7 tablet buttons (5 user-definable including A1/A2 buttons)
- On-screen QWERTY keyboard
- Optional keyboards (Lite and Premium):11,14
  - Emissive red backlit with 4 adjustable levels
  - 87-key with dedicated Windows® key
  - Pressure-sensitive touchpad with multi touch

#### **POWER**

- Hot-swappable twin Li-lon battery packs
  - Standard lightweight batteries: 11.1V, 1990mAh (each battery)
  - Optional long life batteries: 10.8V, 4120mAh (each battery)
- Battery operation: 10 hours (20 hours with opt. long life batteries)
- Battery charging time: 3 hours (with in parallel charging technology)
- AC Adapter: AC 100V-240V 50/60Hz, auto sensing/switching worldwide power supply

#### **SECURITY**

- TPM v.2.04
- NIST BIOS compliant
- Persistence® technology by Absolute embedded in BIOS
- Kensington cable lock slots x2 (on tablet and Premium Keyboard)
- Optional fingerprint reader
- Optional insertable SmartCard CAC reader
- Optional contactless SmartCard CAC reader 13.56MHz (ISO 14443 A/B compliant)

#### **DIMENSIONS/WEIGHT**

- 12.3" (L) x 11.4" (W) x 1.8" (H) 18
- 6.1lbs.

## WARRANTY

Three-year Limited Warranty