Panasonic



Panasonic recommends Windows.

TOUGHBOOK 54

- 14" HD (768p) and FHD (1080p) displays
- Available daylight-readable 1000 Nit gloved multi touch display
- Desktop class performance with available discrete graphics and dual fans
- MIL-STD-810G and IP51 certified magnesium alloy design with built-in handle
- Available 2nd drive, hot-swappable 2nd battery, 2nd LAN, Serial, DVD, antenna pass-through, SmartCard readers and more
- Industry leading driver packages for ease of deployment and support
- Available TPM 2.0 Security[1]
- Available with P.180 for seamless global connectivity[14,15]

MIL-STD-810G

IP51

3-FOOT DROP RATING

P.180 GET WORK DONE.™

THE WORLD'S LIGHTEST AND THINNEST SEMI-RUGGED LAPTOP IN ITS CLASS.

The Toughbook® 54 laptop from Panasonic uses the latest advances to create a laptop up to 2 lbs. lighter and 0.5" thinner than the competition. It features a spill-resistant, full magnesium alloy design, hard drive heater, backlit keyboard, and is available in four different models to suit every need. The Toughbook 54 has a wide range of integrated options, such as dedicated GPS, 4G LTE mobile broadband with satellite GPS, antenna pass-through, and insertable and contactless SmartCard CAC readers. It is the only laptop in its class to offer a rugged Fischer USB port, another feature that makes the Toughbook 54 one of the most versatile and advanced semi-rugged notebooks on the market.

TOUGHBOOK®

TOUGHBOOK 54

SOFTWARE

- Panasonic Utilities (including Dashboard), Recovery Partition
- Enterprise ready driver packages including CAB files and one-click driver bundles

DURABILITY

- MIL-STD-810G certified (3' drop, shock, vibration, sand, dust, altitude, high/low temperature, high temperature tactical, temperature shock, humidity)[2]
- IP51 certified[2]
- Spill-resistant keyboard
- Magnesium alloy case with handle
- Storage drive heater
- Shock-mounted caged storage drive
- Removable quick-release battery and storage drive
- Dual fans (Performance model)
- Preinstalled replaceable screen film for LCD protection (Gloved Multi Touch model)

OPERATING SYSTEM

- Windows® 10 Pro 64-bit
  - CPU
    - Intel® Core™ i5-7300U vPro™ processor (7th Gen CPU) 2.6GHz with Turbo Boost up to 3.5GHz, 3MB cache
    - Intel® Core™ i7-7600U vPro™ processor (7th Gen CPU) 2.8GHz with Turbo Boost up to 3.9GHz, 4MB cache
  - Graphics
    - Intel® HD Graphics 620 (all models)
    - AMD Radeon™ Pro WX 4150 (Performance model)
  - Memory (RAM) - 2 slots upgradeable
    - Performance model: 16GB up to 32GB total (DDR4-2133MT/s)[4]
    - Other models: 8GB, 16GB or 32GB[3] total (DDR4-2133MT/s)[4]
  - Storage Drive Shock-mounted with Heater (quick-release)
    - 500GB HDD (5400rpm Lite model); 256GB SSD other models[4]
    - Optional 512GB/1TB SSD, 1TB 7200rpm HDD[4]
    - Optional OPAL encrypted SSD
  - Optional 2nd Storage Drive with Heater (trained technician removable)[3]
    - 256GB/512GB/1TB SSD[4]
- Windows 7 Professional 64-bit downgrade (from Windows 10)
  - CPU
    - Intel® Core™ i5-6300U vPro™ processor (6th Gen CPU) 2.4GHz with Turbo Boost up to 3.0GHz, 3MB cache
    - Intel® Core™ i7-6600U vPro™ processor[8] (6th Gen CPU) 2.6GHz with Turbo Boost up to 3.4GHz, 4MB cache
  - Graphics
    - Intel® HD Graphics 520 (all models)
    - AMD FirePro™ M5100 (Performance model)
  - Memory (RAM) - 2 slots upgradeable
    - Performance model: 8GB or 16GB total (DDR3L-1600MT/s)[4]
    - Other models: 4GB, 8GB or 16GB[3] total (DDR3L-1600MT/s)[4]
  - Storage Drive Shock-mounted with Heater (quick-release)
    - 500GB HDD (5400rpm Lite model; 7200rpm other models)[4]
    - Optional 256GB/512GB/1TB SSD, 1TB 7200rpm HDD[4]
    - Optional OPAL encrypted SSD
  - Optional 2nd Storage Drive with Heater (trained technician removable)[3]
    - 256GB/512GB/1TB SSD[4]

DISPLAY

- Display Size and Resolution
  - Gloved Multi Touch model: 14.0" FHD 10-pt capacitive 1920 x 1080 (1000 nit)
  - Performance model: 14.0" FHD 1920 x 1080
  - Prime and Lite models: 14.0" HD 1366 x 768
- IPS with direct bonding on FHD displays
- Anti-reflective (AR)[3] and anti-glare (AG) screen treatments
- Triple monitor support through HDMI and optional VGA
- Concealed mode (configurable)

AUDIO

- Integrated dual microphone
- Intel® High Definition Audio compliant
- Integrated speakers
- Keyboard volume and mute controls

CAMERAS

- 1080p webcam with dual mic and camera on/off indicator[3] (optional on 6th Gen CPU models, standard on all 7th Gen CPU models except Lite model)

KEYBOARD & INPUT

- Gloved Multi Touch model: Stylus pen, stylus holder and cleaning cloth are optional[5]
- Gloved Multi Touch model: Supports glove mode and rain mode
- 2 user-definable keys (A1/A2)
- 87-key with dedicated Windows® key
- Emissive backlit keyboard with 4 adjustable levels (white backlit on 6th Gen CPU models, red backlit on 7th Gen CPU models)
- Electrostatic touchpad with multi touch

DVD DRIVE

- Optional DVD Super MULTI Drive[5]

INTERFACE & EXPANSION

Docking Connector	24-pin
USB 3.0 (x 3)	Type A (including one 1.5A port)
Optional USB 2.0 (x 1)	Type A[3,6]
Optional Rugged Fischer® USB (Core Series)	5-pin[3,6]
SD card (SDXC)	UHS-II
HDMI	Type A
Optional VGA	D-sub 15-pin
10/100/1000 Ethernet	RJ-45
10/100/1000 2nd LAN (Ethernet)	RJ-45[3,6]
Audio In/Out	3.5mm Mini-jack stereo
Optional Serial (True)	D-sub 9-pin[3]
Optional PC card	Type II[3,5]
Mini-SIM	2FF

WIRELESS

P.180 GET WORK DONE.™

- Opt. 4G LTE multi carrier mobile broadband w/ satellite GPS (LTE-Advanced on 7th Gen CPU models)
- Certified with Verizon, AT&T, Sprint and P.180[14]
- Optional dedicated GPS (u-blox NEO-M8N)[3,6]
- Optional dual high-gain antenna pass-through[3]
- Intel® Dual Band Wireless-AC 8260 Wi-Fi 802.11a/b/g/n/ac (8265 on 7th Gen CPU models)
- Bluetooth® v4.1 + EDR (Class 1)[13]
- Slide on/off switch

POWER

- Li-Ion battery pack:
  - Lite model (lightweight battery): 10.8V, typical 3220mAh, min. 3050mAh
  - Other models (long life battery): 11.1V, typical 4200mAh, min. 4080mAh
  - Media bay 2nd battery: 11.1V, typical 2960mAh, min. 2860mAh[5]
- Battery operation[8]:
  - 7th Gen CPU models:
    - Lite model: 7 hours (14 hours with opt. 2nd battery)
    - Prime model: 12 hours (20 hours with opt. 2nd battery)
    - Performance & Touch models: 10 hours (17 hours with opt. 2nd battery)
  - 6th Gen CPU models
    - Lite model: 9 hours (16 hours with opt. 2nd battery)
    - Other models: 11 hours (18 hours with opt. 2nd battery)
- Hot swap with optional media bay 2nd battery
- Battery charging time: 2.5 hours (each battery)[8]
  - Quick charge: 80% charge in approx 1 hour
- AC Adapter: AC 100V-240V 50/60Hz, auto sensing/switching worldwide power supply

SECURITY FEATURES

- TPM v1.2 (TPM v2.0 available)[1]
- NIST BIOS compliant
- Persistence® technology by Absolute embedded in BIOS[10]
- Kensington cable lock slot
- Optional fingerprint reader[3,7]
- Optional insertable SmartCard CAC reader (bottom)
- Optional contactless SmartCard CAC reader[3,7]
  - 13.56MHz (ISO 15693 & 14443 A/B compliant)

WARRANTY

- 3-year limited warranty, parts and labor

DIMENSIONS & WEIGHT

- 10.7"(L) x 13.6"(W) x 1.2"(H)[11]
- 4.2 lbs. (Lite model), 4.4 lbs. (Prime model)
- 4.6 lbs. (Performance and Gloved Multi Touch models)

INTEGRATED OPTIONS[12]

- 4G LTE multi carrier mobile broadband with satellite GPS
- Dual antenna pass-through[3]
- Dedicated GPS (u-blox) or 2nd LAN or 4th USB (2.0) or rugged Fischer USB[3]
- PC Card[3] or DVD drive or insertable SmartCard CAC (media bay) or media bay 2nd battery or stylus pen holder
- Contactless SmartCard CAC or fingerprint reader[3]
- Insertable SmartCard CAC reader (bottom)
- Serial[3]
- VGA

SELECT ACCESSORIES[12]

AC Adapter 100W (3-prong)	CF-AA5713AM
Long Life Battery Pack	CF-VZSU0PW
Lightweight Battery Pack	CF-VZSU0LW
Media Bay 2nd Battery Pack[5]	CF-VZSU0KW
Battery Charger	CF-VCBTB3W
LIND Car Charger 120W	CF-LNDDC120
LIND Solar Charge System	PASC1580-4464
ToughMate Always-on 54 Case	TBC54AOCS-P
ToughMate ComUniversal Carrying Case	TBCCOMUNV-P
ToughMate Backpack	TBCBPK-P
Memory Cards	
– 4GB DDR3L (6th Gen CPU models)	CF-BAZ1504
– 8GB DDR3L (6th Gen CPU models)	CF-BAZ1508
– 8GB DDR4 (7th Gen CPU models)	CF-BAZ1708
– 16GB DDR4 (7th Gen CPU models)	CF-BAZ1716
Desktop Dock	CF-VEB541AU
Vehicle Docks (no pass-through)	
– Gamber-Johnson with LIND power supply	7170-0250-P
– Havis with LIND power supply	CF-H-PAN-422-P
Vehicle Docks (dual pass-through)	
– Gamber-Johnson with LIND power supply	7170-0251-P
– Havis with LIND power supply	CF-H-PAN-422-2-P
AntennaPlus Dual LTE & GPS Antenna Kit	
– Threaded Black Mount	AP-PAN-CCGPD-Q-BL
– Threaded White Mount	AP-PAN-CCGPD-Q-WH
Cradlepoint Router	
– Verizon LTE	CP-IBR1100LPE-VZ
– Multi Carrier LTE-Advanced	CP-IBR1100LP6-NA
– Multi Carrier LTE-Advanced (compact size)	CP-IBR900LP6-NA
Gloved Multi Touch Stylus	FZ-VNPM11AU
14.0" Gloved Multi Touch LCD Protective Film	CF-VPF29U

Please consult your reseller or Panasonic representative before purchasing.

[1] TPM 1.2 ships by default on i5-6300U and i7-6600U models, but can run TPM2.0 – see below Microsoft link for details: *support.microsoft.com/en-us/help/2920188/update-to-add-support-for-tpm-2.0-in-windows-7-and-windows-server-2008-r2*.

[2] Tested by national independent third party lab 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 IP51.

[3] Not available on Lite model.

[4] 1GB = 1,000,000,000 bytes. Total usable memory will be less depending upon actual system configuration.

[5] DVD, PC Card insertable SmartCard CAC (media bay), Media Bay 2nd Battery and stylus pen holder are mutually exclusive. As an alternative, units can be configured with insertable SmartCard CAC reader (bottom). NOTE: DVD drive is serviceable by trained and authorized professionals only – please contact a Panasonic representative for program details.

[6] Dedicated GPS (u-blox), 4th USB (2.0), rugged Fischer USB and 2nd LAN are mutually exclusive.

[7] Contactless SmartCard CAC and fingerprint readers are mutually exclusive.

[8] 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 of Win10 models from MobileMark 2014 at 150 nit and Win7 models from MobileMark 2007 at 60 nit.

[10] Requires software and activation to enable theft protection.

[11] 1.5" height on Performance model and all models with the following integrated options: insertable SmartCard (bottom), 2nd LAN, 4th USB (2.0), rugged Fischer USB, VGA and Serial.

[12] Accessories and Integrated Options may vary depending on your notebook configuration. Not all items are currently available. Visit Panasonic website for more accessories and details.

[13] Bluetooth 4.0 (Class 1) + EDR for Windows 7 Professional.

[14] P.180 is available only for Intel® Core™ i5-7300U and i7-7600U models. For more information about P.180, please visit, PanasonicP180.com.



TOUGHBOOK®

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