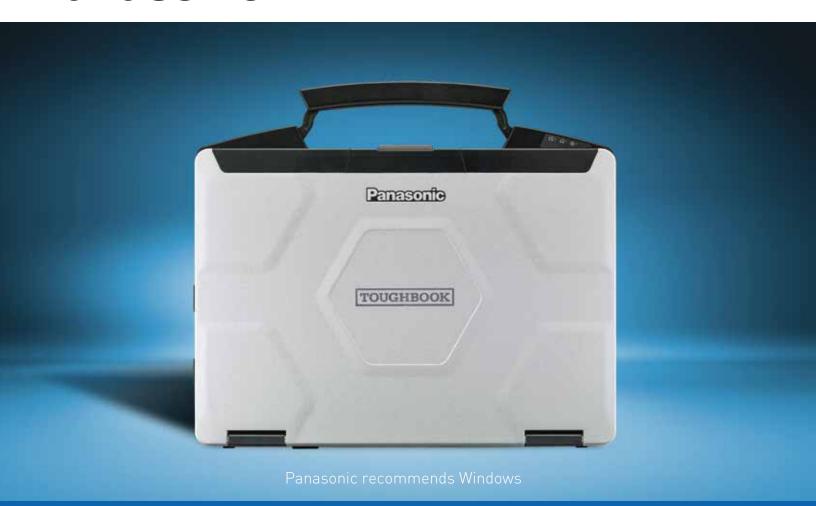
## **Panasonic**



### 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, SmartCard readers and more
- Industry leading driver packages for ease of deployment and support
- Available TPM 2.0 Security<sup>1</sup>







# ONE OF THE WORLD'S LIGHTEST AND THINNEST SEMI-RUGGED LAPTOPS 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 two 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, 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.

1.866.413.3099 business.panasonic.ca



## TOUGHBOOK 54

SOFTWARE	■ Windows® 10 Pro 64-bit ■ 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]? IP51 certified? Spill-resistant keyboard Magnesium alloy case with handle Storage drive heater Shock-mounted caged storage drive Removable quick-release battery and storage drive Preinstalled replaceable screen film for LOD protection (Gloved Multi Touch model)	
OPERATING SYSTEM	■ CPU  Intel® Core™ i5-7300U vPro™ processor (7th Gen CPU) 2.6GHz with Turbo Boost up to 3.5GHz, 3MB cache  Graphics  Intel® HD Graphics 620 (all models)  Memory (RAM) - 2 slots upgradeable  80B, 16GB or 32GB total (IDR4-2133MT/s)³  Storage Drive Shock-mounted with Heater (quick-release)  - 500GB HDD / 540Drpm; 256GB SSD³  Optional 5126B/TIB SSD, 1TB 7200rpm HDD³  Optional 274 Storage Drive with Heater (trained technician removable)  - 256GB/512GB/1TB SSD³	
DISPLAY	■ Display Size and Resolution — Gloved Multi Touch model: 14.0" FHD 10-pt capacitive 1920 x 1080 (1000 nit) — Non-touch: 14.0" HD 1366 x 768 ■ IPS with direct bonding on FHD displays ■ Anti-reflective (AR] and anti-glare (AG) screen treatments ■ Triple monitor support through HDMI and optional VGA ■ Concealed mode (configurable) ■ Optional AMD Firepro™ M5100 available on Touch Model	
AUDIO	Integrated dual microphone Intel® High Definition Audio compliant Integrated speakers Keyboard volume and mute controls	
CAMERAS	<ul> <li>1080p webcam with dual mic and camera on/off indicator (optional on 6th Gen CPU models, standard on all 7th Gen CPU models)</li> </ul>	
KEYBOARD & INPUT	Gloved Multi Touch model: Stylus pen, stylus holder and cleaning cloth are optional <sup>4</sup> 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 <sup>4</sup>	
INTERFACE & EXPANSION	■ Docking Connector ■ USB 3.0 k x3] Optional USB 2.0 k 1] Optional USB 2.0 k 1] Optional Rugged Fischer® USB (Core Series) SD card (SDXC) ■ HDM! Optional VGA ■ 10/100/1000 Ethernet Optional V0/100/1000 2nd LAN (Ethernet) Audio In/Out Optional Serial (True) Optional PC card Mini-SIM ■ 24-pin Type A UHS-II Type A D-sub 15-pin RJ-45 RJ-45 RJ-45 S-pin Mini-jack stereo D-sub 9-pin Type II Mini-SIM	
WIRELESS	<ul> <li>Opt. 4G LTE multi carrier mobile broadband w/ satellite GPS (LTE-Advanced on 7th Gen CPU models)</li> <li>Optional dedicated GPS (u-blox NEO-M8N)<sup>2</sup></li> <li>Optional dual high-gain antenna</li> <li>Intel® Dual Band Wireless-AC 8260 Wi-Fi 802.11a/b/g/n/ac (8265 on 7th Gen CPU models)</li> <li>Bluetooth® v4.1 + EDR (Class 1)<sup>11</sup></li> <li>Slide on/off switch</li> </ul>	
POWER	■ Li-lon battery pack:  - Long life battery: 11.1V, typical 4200mAh, min. 4080mAh  - Media bay 2nd battery: 11.1V, typical 2960mAh, min. 2860mAh*  ■ Battery operation?:  7th Gen CPU models:  - Non-touch: 12 hours [20 hours with opt. 2nd battery]  - Touch models: 10 hours [17 hours with opt. 2nd battery]  6th Gen CPU 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]  - 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®
  Kensington cable lock slot

- Optional fingerprint reader<sup>6</sup>
  Optional insertable SmartCard CAC reader (bottom)
  Optional contactless SmartCard CAC reader<sup>6</sup>
   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)°
  4.4 lbs. (Non-touch)
  4.6 lbs. (Gloved Multi Touch model)

#### INTEGRATED OPTIONS<sup>10</sup>

- 4G LTE multi carrier mobile broadband with satellite GPS

- Dual antenna
  Dedicated GPS (u-blox) or 2nd LAN or 4th USB (2.0) or rugged Fischer USB
  PC Card or DVD drive or insertable SmartCard CAC (media bay) or media bay
  2nd battery or stylus pen holder
- Contactless SmartCard CAC or fingerprint reader
   Insertable SmartCard CAC reader [bottom]
   Serial
   VGA

#### SELECT ACCESSORIES<sup>10</sup>

<ul> <li>AC Adapter 100W (3-prong)</li> </ul>	CF-AA5713AM
<ul> <li>Long Life Battery Pack</li> </ul>	CF-VZSU0PW
<ul> <li>Lightweight Battery Pack</li> </ul>	CF-VZSU0LW
Media Bay 2nd Battery Pack <sup>4</sup>	CF-VZSU0KW
<ul> <li>Battery Charger</li> </ul>	CF-VCBTB3W
<ul> <li>LIND Car Charger 120W</li> </ul>	CF-LNDDC120
<ul> <li>LIND Solar Charge System</li> </ul>	PASC1580-446
<ul> <li>ToughMate Always-on 54 Case</li> </ul>	TBC54A0CS-F
<ul> <li>ToughMate ComUniversal Carrying Case</li> </ul>	TBCCOMUNV-
<ul> <li>ToughMate Backpack</li> </ul>	TBCBPK-P
<ul> <li>Memory Cards</li> </ul>	
<ul> <li>8GB DDR4 (7th Gen CPU models)</li> </ul>	CF-BAZ1708
<ul> <li>16GB DDR4 (7th Gen CPU models)</li> </ul>	CF-BAZ1716
<ul> <li>Desktop Dock</li> </ul>	CF-VEB541AU
Gloved Multi Touch Stylus	FZ-VNPM11AU
<ul> <li>14.0" Gloved Multi Touch LCD Protective Film</li> </ul>	CF-VPF29U

#### Please consult your reseller or Panasonic representative before purchasing.

<sup>1</sup> 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-in-windows-8-in-wi<sup>2</sup> 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.

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- $^3$  1GB = 1,000,000,000 bytes. Total usable memory will be less depending upon actual system configuration.
- OVD, 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.
- <sup>5</sup> Dedicated GPS (u-blox), 4th USB (2.0), rugged Fischer USB and 2nd LAN are mutually exclusive.
- <sup>6</sup> Contactless SmartCard CAC and fingerprint readers are mutually exclusive.
- <sup>7</sup> 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.
- 8 Requires software and activation to enable theft protection.
- \* 1.5" height on all models with the following integrated options: insertable SmartCard (bottom), 2nd LAN, 4th USB (2.0), rugged Fischer USB, VGA and Serial.
- 10 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.
- 11 Bluetooth 4.0 (Class 1) + EDR for Windows 7 Professional.







