

Panasonic recommends Windows.

# 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
- The World's Lightest 14" Semi-rugged Laptop—2 lbs. Lighter than the Competition
- 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

**IP51**

**3-FOOT  
DROP RATING**

**MIL-STD-  
810G**

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

The new Toughbook® 54 laptop from Panasonic uses the latest advances to create a laptop 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 readers. It is the only semi-rugged laptop that offers an optional 2nd battery allowing hot-swap battery replacement without the need to shut down or hibernate. It is also the only laptop in its class to offer dual drives, another feature that makes the Toughbook 54 one of the most versatile and advanced semi-rugged notebooks on the market.

1.800.662.3537  
[us.panasonic.com/toughbook/54](http://us.panasonic.com/toughbook/54)

**TOUGHBOOK®**

# TOUGHBOOK 54

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<b>SOFTWARE</b>	<ul style="list-style-type: none"> <li>Windows® 8.1 Pro</li> <li>Panasonic Utilities (including Dashboard), Recovery Partition</li> </ul>
<b>DURABILITY</b>	<ul style="list-style-type: none"> <li>MIL-STD-810G certified (3' drop, shock, vibration, sand, dust, altitude, high/low temperature, high temperature tactical, temperature shock, humidity)<sup>1</sup></li> <li>IP51 certified<sup>1</sup></li> <li>Spill-resistant keyboard</li> <li>Magnesium alloy case with handle</li> <li>Hard drive heater</li> <li>Shock-mounted flex-connect hard drive with quick-release</li> <li>Dual fans (Performance model)</li> <li>Pre-installed replaceable screen film (Gloved Multi Touch model)</li> </ul>
<b>CPU</b>	<ul style="list-style-type: none"> <li>Intel® Core™ i5-5300U vPro™ Processor<sup>2</sup> <ul style="list-style-type: none"> <li>~2.3GHz with Turbo Boost up to 2.9GHz</li> <li>~3MB cache</li> </ul> </li> </ul>
<b>STORAGE &amp; MEMORY</b>	<ul style="list-style-type: none"> <li>Memory (RAM)           <ul style="list-style-type: none"> <li>Performance model<sup>3</sup>: 8GB or 16GB SDRAM (DDR3L-1600MHz)</li> <li>Other models: 4GB, 8GB or 16GB<sup>4</sup> SDRAM (DDR3L-1600MHz)</li> </ul> </li> <li>Primary Hard Drive (quick-release)           <ul style="list-style-type: none"> <li>500GB HDD (5400rpm Lite model; 7200rpm other models)<sup>5,6</sup></li> <li>Optional 128GB SSD, 256GB SSD, 1TB 7200rpm HDD<sup>5,6</sup></li> <li>Hard drive heater</li> <li>Shock-mounted with flex-connect</li> </ul> </li> <li>Optional Second Drive (onboard)<sup>4</sup> <ul style="list-style-type: none"> <li>128GB SSD or 256GB SSD<sup>5,6</sup></li> <li>Hard drive heater</li> <li>Trained technician removable</li> </ul> </li> </ul>
<b>DISPLAY</b>	<ul style="list-style-type: none"> <li>Display Size and Resolution           <ul style="list-style-type: none"> <li>Gloved Multi Touch model: 14.0" FHD 1920 x 1080 (1000 nit)</li> <li>Performance model<sup>7</sup>: 14.0" FHD 1920 x 1080</li> <li>Prime and Lite models: 14.0" HD 1366 x 768</li> </ul> </li> <li>IPS with direct bonding on FHD displays</li> <li>Anti-reflective<sup>8</sup> and anti-glare screen treatments</li> <li>Graphics           <ul style="list-style-type: none"> <li>Intel® HD Graphics 5500 (all models)</li> <li>AMD FirePro™ M5100 (Performance model)</li> </ul> </li> <li>Dual monitor support through HDMI and/or optional VGA</li> <li>Concealed mode (configurable)</li> </ul>
<b>AUDIO</b>	<ul style="list-style-type: none"> <li>Intel® high-definition audio compliant</li> <li>Integrated speakers</li> <li>Keyboard volume and mute controls</li> </ul>
<b>KEYBOARD &amp; INPUT</b>	<ul style="list-style-type: none"> <li>Touch, gestures and optional stylus pen (Gloved Multi Touch model)</li> <li>2 user-definable keys (A1/A2)</li> <li>Dashboard</li> <li>87-key with dedicated Windows® key</li> <li>Emissive backlit keyboard<sup>4</sup></li> <li>Electrostatic touchpad with multi touch support</li> </ul>
<b>DVD DRIVE</b>	<ul style="list-style-type: none"> <li>Optional DVD Super MULTI Drive<sup>7</sup></li> </ul>
<b>CAMERAS</b>	<ul style="list-style-type: none"> <li>Optional 1080P webcam with mic and camera on/off indicator<sup>4</sup></li> </ul>
<b>EXPANSION SLOTS</b>	<ul style="list-style-type: none"> <li>Optional PC card Type II<sup>3,4,7</sup></li> <li>SD card (SDXC UHS-II)</li> </ul>
<b>INTERFACE</b>	<ul style="list-style-type: none"> <li>Docking Connector: 24-pin Type A</li> <li>HDMI: Type A</li> <li>Optional VGA: D-sub 15-pin</li> <li>Headphones/Mic: Mini-jack stereo</li> <li>Optional Serial (True): D-sub 9-pin<sup>4</sup></li> <li>USB 3.0 (x 3): Type A           <ul style="list-style-type: none"> <li>Always on USB, USB rapid charging</li> </ul> </li> <li>Optional USB 2.0 (x 1): Type A<sup>4,8</sup></li> <li>Rugged Fischer® USB (Core Series): 5-pin<sup>4,8</sup></li> <li>10/100/1000 Ethernet: RJ-45</li> <li>10/100/1000 2nd LAN (Ethernet): RJ-45<sup>4,8</sup></li> </ul>
<b>WIRELESS</b>	<ul style="list-style-type: none"> <li>Optional integrated 4G LTE multi carrier mobile broadband with satellite GPS</li> <li>Optional dedicated GPS (u-blox NEO M8N)<sup>8</sup></li> <li>Optional dual high-gain antenna pass-through<sup>4</sup></li> <li>Optional contactless SmartCard/NFC reader<sup>3,4,9</sup></li> <li>Intel® Dual Band Wireless-AC 7265 802.11a/b/g/n/ac</li> <li>Intel® Wireless Display (WiDi)</li> <li>Bluetooth® v4.0 + EDR (Class 1)</li> <li>Security           <ul style="list-style-type: none"> <li>Authentication: LEAP, WPA, 802.1x, EAP-TLS, EAP-FAST, PEAP</li> <li>Encryption: CKIP, TKIP, 128-bit and 64-bit WEP, Hardware AES</li> </ul> </li> <li>Slide on/off switch</li> </ul>
<b>POWER</b>	<ul style="list-style-type: none"> <li>Li-Ion battery pack<sup>10</sup>:           <ul style="list-style-type: none"> <li>Lightweight battery (standard on Lite model): 10.8V, typical 3220mAh, min. 3050mAh</li> <li>Long life battery (standard on other models): 11.1V, typical 4200mAh, min. 4080mAh</li> <li>Media bay 2nd battery<sup>7</sup>: 11.1V, typical 2960mAh, min. 2860mAh</li> </ul> </li> <li>Battery operation<sup>11</sup>:           <ul style="list-style-type: none"> <li>Lite model: 8 hours (15 hours with opt. 2nd battery)</li> <li>Other models: 11 hours (18 hours with opt. 2nd battery)</li> </ul> </li> <li>Hot-swap with optional media bay 2nd battery</li> <li>Battery charging time<sup>12</sup>:           <ul style="list-style-type: none"> <li>2 hours (each battery)</li> <li>Quick charge<sup>13</sup>: 80% charge in approx 1 hour</li> </ul> </li> <li>AC Adapter: AC 100V-240V 50/60Hz, auto sensing/switching worldwide power supply</li> <li>Battery status and battery hot-swap LED indicators</li> </ul>
<b>POWER MANAGEMENT</b>	<ul style="list-style-type: none"> <li>Suspend/Resume Function, Hibernation, Standby, ACPI BIOS</li> </ul>

## SECURITY FEATURES

- Password Security: Supervisor, User, Hard Disk Lock
- Kensington cable lock slot
- Trusted platform module (TPM) security chip v.1.2
- Computrace® theft protection agent in BIOS<sup>11</sup>
- Optional fingerprint reader<sup>4,9</sup>
- Optional insertable SmartCard reader (bottom)
- Optional 13.56MHz contactless SmartCard/NFC reader<sup>3,4,9</sup>
  - ISO 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)<sup>12</sup>
- 4.2 lbs. (Lite model), 4.4 lbs. (Prime model)
- 4.6 lbs. (Performance and Gloved Multi Touch models)

## INTEGRATED OPTIONS<sup>13</sup>

- 4G LTE multi carrier mobile broadband with satellite GPS
- Dual antenna pass-through<sup>4</sup>
- Dedicated GPS (u-blox) or 2nd LAN or 4th USB (2.0) or rugged Fischer USB<sup>3,4</sup>
- PC Card<sup>3,4</sup> or DVD drive or media bay 2nd battery
- Contactless SmartCard/NFC or fingerprint readers<sup>4</sup>
- Insertable SmartCard reader (bottom)
- Serial<sup>4</sup>
- VGA
- 1080p webcam and mic<sup>4</sup>
- Primary hard drive (quick-release):
  - 128GB SSD, 256GB SSD and 1TB 7200rpm HDD with heaters
- 2nd hard drive (onboard)<sup>4</sup>:
  - 128GB SSD and 256GB SSD with heaters

## SELECT ACCESSORIES<sup>13</sup>

- AC Adapter (3-prong) CF-AA5713AM
- Long Life Battery Pack CF-VZSU0PW
- Lightweight Battery Pack CF-VZSU0LW
- Media Bay 2nd Battery Pack<sup>7</sup> CF-VZSU0KW
- Battery Charger CF-VCBTB3W
- LIND Car Adapter 120W CF-LNDDC120
- ToughMate Always-on 54 Case TBC54A0CS-P
- ToughMate ComUniversal Carrying Case TBCCOMUNV-P
- ToughMate Backpack TBCBPK-P
- Memory Card 4GB CF-WMBA1304G
- Memory Card 8GB CF-WMBA1308G
- Desktop Dock CF-VEB541AU
- Vehicle Cradle (no electronics)
  - Gamber-Johnson 7160-0578-00
  - Havis CF-H-PAN-422-3
- Vehicle Docks (no pass-through)
  - Gamber-Johnson with LIND Power Supply 7170-0250-P
  - Havis with LIND Power Supply CF-H-PAN-422-2-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
- Gloved Multi Touch Stylus FZ-VNPM11U
- 14.0" Gloved Multi Touch LCD Protective Film CF-VPF29U

Please consult your reseller or Panasonic representative before purchasing.

<sup>1</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.

<sup>2</sup>An Intel® Core™ i7 processor is also available on Prime, Performance and Gloved Multi Touch models.

<sup>3</sup>Performance model available early summer. On all models, delayed availability on select options (2nd LAN, rugged Fischer USB, Contactless SmartCard/NFC and PC Card).

<sup>4</sup>Not available on Lite model.

<sup>5</sup>Total usable memory will be less depending upon actual system configuration.

<sup>6</sup>1GB = 1,000,000,000 bytes.

<sup>7</sup>DVD, PC Card and Media Bay 2nd Battery are mutually exclusive.

<sup>8</sup>Dedicated GPS (u-blox), 4th USB (2.0), rugged Fischer USB and 2nd LAN are mutually exclusive.

<sup>9</sup>Contactless SmartCard/NFC and fingerprint readers are mutually exclusive.

<sup>10</sup>Approximate time. 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 2007.

<sup>11</sup>Requires software and activation to enable theft protection.

<sup>12</sup>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.

<sup>13</sup>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.



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