



Panasonic recommends Windows.

## TOUGHBOOK 31

- Sunlight-viewable 1200 nit touchscreen with Panasonic CircuLumin™ Technology
- Full magnesium alloy case with handle
- 19.5-hour battery life (28.5 hours with optional media bay 2nd battery)<sup>4</sup>
- Optional 4G LTE Multi Carrier Mobile Broadband with Satellite GPS
- Standard backlit keyboard and DVD drive
- TPM 2.0 Security

IP65

6-FOOT  
DROP RATING

MIL-STD-  
810G

## POWERFUL, RUGGED AND WIRELESS.

Panasonic presents the Toughbook 31, the reliable laptop offering the world's most rugged design. With drop-shock protection and a MIL-STD-810G certification, it's the undisputed leader in the fully rugged category. Its Intel® Core™ i5 processor packs a punch and amazing battery life—up to 28.5 hours with optional media bay 2nd battery<sup>4</sup>. Combine six generations of delivering rugged performance plus an amazing 18 years of consistent docking compatibility, and you have a computer that will go the distance with you anytime, anywhere.

# TOUGHBOOK 31

Panasonic recommends Windows.

<b>SOFTWARE</b>	<ul style="list-style-type: none"> <li>Windows® 10 Pro</li> <li>Panasonic Utilities (including Dashboard), Recovery Partition</li> <li>Enterprise ready driver packages including CAB files and one-click driver bundles</li> </ul>		
<b>DURABILITY</b>	<ul style="list-style-type: none"> <li>MIL-STD-810G certified [6' drop, shock, vibration, rain, dust, sand, altitude, freeze/thaw, high/low temperature, temperature shock, humidity, explosive atmosphere]<sup>1</sup></li> <li>MIL-STD-461F certified</li> <li>IP65 certified sealed all-weather design<sup>1</sup></li> <li>Optional hazardous location class I division 2, groups ABCD certified model<sup>7</sup></li> <li>Full magnesium alloy case with handle</li> <li>Hard drive heater</li> <li>Shock-mounted hard drive with quick-release</li> <li>Reinforced locking port covers</li> <li>Pre-installed replaceable screen film for touchscreen protection</li> </ul>		
<b>CPU</b>	<ul style="list-style-type: none"> <li>Intel® Core™ i5-7300U vPro™ Processor               <ul style="list-style-type: none"> <li>~ 2.6GHz with Turbo Boost up to 3.5GHz</li> <li>~ 3MB cache</li> </ul> </li> </ul>		
<b>STORAGE &amp; MEMORY</b>	<ul style="list-style-type: none"> <li>Factory Installed Memory (RAM) - 16GB or 32GB DDR4-2133MT/s<sup>2,3</sup></li> <li>Shock-mounted hard drive with quick-release               <ul style="list-style-type: none"> <li>~ 256GB or 512GB SSD with heater<sup>3</sup></li> <li>~ Optional OPAL encrypted SSD with heater<sup>3</sup></li> </ul> </li> </ul>		
<b>DISPLAY</b>	<ul style="list-style-type: none"> <li>13.1" Touchscreen 1024 x 768               <ul style="list-style-type: none"> <li>~ Panasonic CircuLumin™ technology</li> <li>~ 2-1200 nit</li> <li>~ Circular polarizer</li> <li>~ Anti-reflective and anti-glare screen treatments</li> </ul> </li> <li>Intel® HD Graphics 620</li> <li>External video support up to 1280 x 1024 at 16.7 million colors</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>Touchscreen</li> <li>Stylus pen with integrated stylus holder, tether and cleaning cloth</li> <li>87-key with dedicated Windows® key</li> <li>Optional backlit keyboard               <ul style="list-style-type: none"> <li>~ Plastic emissive</li> </ul> </li> <li>Pressure-sensitive touchpad with vertical scrolling support</li> </ul>		
<b>MULTIMEDIA BAY</b>	<ul style="list-style-type: none"> <li>Optional DVD Super MULTI Drive or Media Bay 2nd Battery</li> </ul>		
<b>EXPANSION SLOTS</b>	<ul style="list-style-type: none"> <li>SD card (SDXC)</li> </ul>		
<b>INTERFACE</b>	<table border="0"> <tr> <td> <ul style="list-style-type: none"> <li>Docking connector</li> <li>HDMI</li> <li>VGA</li> <li>Audio In</li> <li>Audio Out</li> <li>Serial</li> <li>Ext. antenna conn.</li> <li>USB 3.0 (x 1), USB 2.0 (x 3)</li> <li>Optional IEEE 1394a (FireWire)</li> <li>10/100/1000 Ethernet</li> <li>Optional 10/100/1000 2nd LAN (Ethernet)</li> <li>SD card (SDXC)</li> <li>Nano -SIM</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>80-pin Type A</li> <li>D-sub 15-pin</li> <li>3.5mm Mini-jack stereo</li> <li>3.5mm Mini-jack stereo</li> <li>D-sub 9-pin</li> <li>50 ohm coaxial</li> <li>Type A 4-pin</li> <li>RJ-45</li> <li>RJ-45</li> <li>UHS-I</li> <li>4FF</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>Docking connector</li> <li>HDMI</li> <li>VGA</li> <li>Audio In</li> <li>Audio Out</li> <li>Serial</li> <li>Ext. antenna conn.</li> <li>USB 3.0 (x 1), USB 2.0 (x 3)</li> <li>Optional IEEE 1394a (FireWire)</li> <li>10/100/1000 Ethernet</li> <li>Optional 10/100/1000 2nd LAN (Ethernet)</li> <li>SD card (SDXC)</li> <li>Nano -SIM</li> </ul>	<ul style="list-style-type: none"> <li>80-pin Type A</li> <li>D-sub 15-pin</li> <li>3.5mm Mini-jack stereo</li> <li>3.5mm Mini-jack stereo</li> <li>D-sub 9-pin</li> <li>50 ohm coaxial</li> <li>Type A 4-pin</li> <li>RJ-45</li> <li>RJ-45</li> <li>UHS-I</li> <li>4FF</li> </ul>
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<b>WIRELESS</b>	<ul style="list-style-type: none"> <li>Optional integrated 4G LTE-Advanced carrier mobile broadband with satellite GPS</li> <li>Optional GPS (u-blox NEO-M8N)</li> <li>Intel® Dual Band Wireless-AC 8265 802.11a/b/g/n/ac</li> <li>Bluetooth® v4.1 + EDR (Class 1)</li> <li>User-selectable antenna pass-through (dual standard, single optional)</li> <li>Slide on/off switch</li> </ul>		
<b>POWER SUPPLY</b>	<ul style="list-style-type: none"> <li>Battery operation: 19.5 hours (28.5 hours with optional media bay 2nd battery)<sup>4</sup></li> <li>Standard long life Li-Ion battery pack (10.65V, typical 8550mAh, min. 8100mAh)</li> <li>Battery charge time: 3.5 hours on/off (6 hours with optional media bay 2nd battery)<sup>4</sup></li> <li>AC Adapter: AC 100V-240V 50/60Hz, auto sensing/switching worldwide power supply</li> </ul>		

<b>SECURITY FEATURES</b>	<ul style="list-style-type: none"> <li>TPM v2.0</li> <li>NIST BIOS compliant</li> <li>Persistence® technology by Absolute embedded in BIOS<sup>5</sup></li> <li>Kensington cable lock slot</li> <li>Optional insertable SmartCard CAC reader</li> </ul>		
<b>WARRANTY</b>	<ul style="list-style-type: none"> <li>3-year limited warranty, parts and labor</li> </ul>		
<b>DIMENSIONS &amp; WEIGHT</b>	<ul style="list-style-type: none"> <li>11.5"(L) x 11.9"(W) x 2.9"(H)</li> <li>7.9 lbs. (8.2 lbs. with optional media bay 2nd battery)</li> </ul>		
<b>HAZARDOUS LOCATION CERTIFICATIONS</b>	<ul style="list-style-type: none"> <li>ANSI/ISA 2.12.01-2013               <ul style="list-style-type: none"> <li>~ Optional class I division 2</li> </ul> </li> </ul>		
<b>INTEGRATED OPTIONS<sup>6</sup></b>	<ul style="list-style-type: none"> <li>4G LTE multi carrier mobile broadband with satellite GPS</li> <li>GPS (u-blox NEO-M8N)</li> <li>2nd LAN</li> <li>Insertable SmartCard reader</li> <li>Media bay 2nd battery</li> <li>HDD and battery lock</li> <li>256GB and 512GB solid state drives (SSD) with heaters               <ul style="list-style-type: none"> <li>~ Optional OPAL encrypted SSD with heater</li> </ul> </li> </ul>		
<b>SELECT ACCESSORIES<sup>7</sup></b>	<table border="0"> <tr> <td> <ul style="list-style-type: none"> <li>AC Adapter 100W (3-prong)</li> <li>Standard Long Life Battery Pack</li> <li>Media Bay 2nd Battery</li> <li>Battery Charger</li> <li>LIND 3-Bay Battery Charger</li> <li>LIND Car Charger 120W</li> <li>LIND Solar Charge System</li> <li>ToughMate ComUniversal Carrying Case (large capacity)</li> <li>ToughMate Backpack</li> <li>ToughMate Sting 31 Case</li> <li>ToughMate Shoulder Strap</li> <li>Desktop Dock</li> <li>Touchscreen Stylus</li> <li>Tether</li> <li>13.1" LCD Protector Film</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>CF-AA5713AM</li> <li>CF-VZSU46AU</li> <li>CF-VZSU1431U</li> <li>CF-VCBTB2W</li> <li>PACH329-1857-P</li> <li>CF-LNDDC120</li> <li>PASC1580-4464</li> <li>TBCCOMUNV-P</li> <li>TBCBPK-P</li> <li>TBC31CASE-P</li> <li>TBCDLXSSKIT-P</li> <li>CF-VEB311U</li> <li>CF-VNP009U</li> <li>CF-VNT002U</li> <li>CF-VPF15U</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>AC Adapter 100W (3-prong)</li> <li>Standard Long Life Battery Pack</li> <li>Media Bay 2nd Battery</li> <li>Battery Charger</li> <li>LIND 3-Bay Battery Charger</li> <li>LIND Car Charger 120W</li> <li>LIND Solar Charge System</li> <li>ToughMate ComUniversal Carrying Case (large capacity)</li> <li>ToughMate Backpack</li> <li>ToughMate Sting 31 Case</li> <li>ToughMate Shoulder Strap</li> <li>Desktop Dock</li> <li>Touchscreen Stylus</li> <li>Tether</li> <li>13.1" LCD Protector Film</li> </ul>	<ul style="list-style-type: none"> <li>CF-AA5713AM</li> <li>CF-VZSU46AU</li> <li>CF-VZSU1431U</li> <li>CF-VCBTB2W</li> <li>PACH329-1857-P</li> <li>CF-LNDDC120</li> <li>PASC1580-4464</li> <li>TBCCOMUNV-P</li> <li>TBCBPK-P</li> <li>TBC31CASE-P</li> <li>TBCDLXSSKIT-P</li> <li>CF-VEB311U</li> <li>CF-VNP009U</li> <li>CF-VNT002U</li> <li>CF-VPF15U</li> </ul>
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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 IP65.

<sup>2</sup> The size of the VRAM cannot be set by the user and varies by operating system as well as size of RAM. Windows 10 Pro 64-bit max. VRAM is 1696MB with 4GB of memory.

<sup>3</sup> 1GB = 1,000,000,000 bytes.

<sup>4</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 from MobileMark 2007 running Windows 7 Professional.

<sup>5</sup> Requires software and activation to enable theft protection.

<sup>6</sup> Accessories and Integrated Options may vary depending on your notebook configuration. Visit Panasonic website for more accessories and details.

<sup>7</sup> Future Availability



1.866.413.3099  
business.panasonic.ca

