



TOUGHBOOK 56



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<https://ap.connect.panasonic.com/vn/en/toughbook-56>

OS (Operating System)	Windows 11 Pro 64-bit MUI(10)
CPU (Mobile Computing Platform) -> Processor	Intel® Core™ Ultra 5 processor 235H, Intel® Core™ Ultra 7 processor 265H ^{*1}
CPU (Mobile Computing Platform) -> Number of cores	14(4+8+2), 16(6+8+2) ^{*1}
CPU (Mobile Computing Platform) -> Graphics chips	Intel® Graphics Support Intel® Arc™ Graphics when equipped with 2 DIMMs and 16GB total Capacity
Memory (RAM) (RAM Standard / Maximum) (Main memory)	Min. 16GB (Option: 32GB+32GB max) DDR5, 5600MT/s ^{*2*3}
Storage	1st Storage (Main SSD):[NVMe Interface] 512GB / 1TB ^{*1} / 2TB ^{*1} OPAL or FIPS ^{*1} , 2nd Storage (2nd SSD) ^{*4*5} : [NVMe Interface] 512GB / 1TB / 2TB OPAL or FIPS,
Display & Graphics	Dimensions:14.0" 16:10, Technology:AR, Resolution:1920x1200, Internal LCD:16,777,216 colors ^{*6} ,
Wireless	Cellular (WWAN) (Mobile Broadband) ^{*1} :Sierra Wireless™ EM7595 (NA 4G Model) / Telit Cinterion LN920A6 (EU 4G Model) / Sierra Wireless™ EM9291 (5G Model), GPS (Global Positioning) ^{*1} :Yes Chip: u-blox NEO-M9N GPS/GLONASS/Galileo/BeiDou/QZSS/SBAS Support, Wi-Fi:XXX, Bluetooth:v5.4; Classic mode/ Low Energy mode, Class 1,
I/O Ports (Interface)	USB-Type C: x2, USB-Type A: x1 HDMI: x1, LAN: x1, Audio In/Out: x1,
Camera -> Front *	5.2 MP with IR Sensor and Privacy Shutter Video: 2560 x 1440 pixels, 30fps Still: 2880 x 1800 (5.2M)
Audio (Sound)	Microphone:Stereo, 2 microphones with AI noise suppression, Speaker:Stereo, 98dB ^{*7}
Security	Microsoft Secured Core PC:Yes, Fingerprint Reader (Fingerprint):Option, Facial Recognition:Yes, Insertable Smart Card Reader:Option, Contactless Smart Card Reader:Option, Security chip (TPM Security Chip):TPM (TCG V2.0 compliant),
Keyboard & Input (Keyboard)	User selectable Keyboard
Pointing device -> Touchscreen (Touch panel)	10 Finger touch (Capacitive) /φ4 Passive Stylus
Pointing device -> Touchpad	Yes
Sensors	Ambient light sensor
Dimensions -> Main Unit	345mm x 272mm x 36.3mm ^{*8} (13.6" x 10.7" x 1.43") (without protruding parts)
Weight -> Main Unit	Approx.2.30 kg {4.9 lbs} : FHD+TS, Approx.2.13 kg {4.7 lbs} : FHD (non-TS), Starting from 1.97 kg {4.3lbs} : Lightest model
Weight -> AC adapter	Max. 391g (without ACcable and plug)
Battery -> Battery Life	Approx. 12 hours (Mobile Mark™ 30),Approx. 24 hours with 2nd battery (Mobile Mark™ 30)
Battery -> Charging time	Approx. 3h
Power Consumption	Approx. 110W (maximum when recharging in the ON state) ^{*9}
Power (Power supply) -> AC adapter	Input: 100 V - 240 V AC, 50 Hz/ 60 Hz, Output: 15.6 V DC, 7.05 A
Power (Power supply) -> USB Power Delivery	Yes
Power (Power supply) -> Battery (Battery pack)	Pack, FZ-VZSU1HU, Li-ion 10.8 V, 6300 mAh Option for 2nd Battery Pack
Power (Power supply) -> Hot Swap	Yes
Durability -> Drop resistance ***	76cm {30 inch} / 6sides, 30cm {11.8 inch} / 26 sides ^{*10 *11}
Durability -> Dust resistance ***	IP53
Durability -> Water resistance ***	IP53
Operating temperature ***	-29°C to +60°C ^{*16}
Electromagnetic Compatibility (EMC)	Complied MIL-STD-461G RE102 Fixed wing internal
Storage temperature	- 20 °C to 60 °C {-4 °F to 140 °F}

Environment (Sustainability) ->	EPEAT Silver
Environment (Sustainability)	
Software (Panasonic Apps)	Emergency Notification Setting Intel Graphics Software Microsoft Office Trial* ¹⁴ Panasonic PC 2D Barcode Key Emulator* ¹⁵ Panasonic PC Asset Tag Entry Panasonic PC Camera Utility* ¹⁵ Panasonic PC Hub Panasonic PC Support File Copy Utility PC Information Viewer Realtek Audio Console System Interface Manager Waves MaxxAudio Aptio Setup Utility PC-Diagnostic Utility
Footnote Description	*1: Optional, *2: 1 MB = 1,048,576 bytes / 1 GB = 1,073,741,824 bytes, *3: Memory size of the factory default depends on the model. *4: Option for Left Expansion Area *5: For Left Expansion Area, exclusively configurable by selecting one from, Optical Drive, 2nd SSD, Smartcard Reader or Barcode Reader. *6: A 16,777,216 color display is achieved by using the dithering function. *7: The sound pressure level at a distance of 30cm *8: Average value. May differ depending on models and options. *9: Approx.0.3 W when the battery pack is fully charged (or not being charged) and the computer is OFF. Even when the AC adaptor is not connected to the computer, power is consumed (Max. 0.15 W) simply by having the AC adaptor plugged into an AC outlet. Rated power consumption 23-E-1 *10: Tested at Panasonic factory.It does not guarantee against damage or malfunction. *11: Tested drops on plywood. *12: Do not expose the skin to this product when using the product in a hot or cold environment. When using in hot or cold environment, some peripherals may fail to work properly. Check the operation environment of the peripherals. Using this product continuously in a hot environment will shorten the product life. Avoid use in these types of environments. When using in low temperature environment, startup may become slow or battery operation time may become short. The computer consumes power when the SSD is warming up during startup. Therefore, if you are using battery power and the remaining power is low, the computer may not start up. *13: UL60950 – 1 Evaluated for use at ambient temperatures up to 35 °C {95 °F} when used with optional AC Power Adaptor and 40 °C {104 °F} when used without AC power adaptor. *14: To continue using this software after the end of the trial, purchase a license by following the on-screen instructions. *15: Depending on the models, this application software doesn't work.*16: Tested By an independent third party lab referencing MIL-STD 810H and IEX 60529