

Panasonic Product Overview

TOUGHBOOK



Product	TOUGHBOOK N1	TOUGHBOOK T1	TOUGHBOOK S1	TOUGHBOOK A3		TOUGHBOOK M1	TOUGHBOOK G1	TOUGHBOOK 55	TOUGHBOOK 20	TOUGHBOOK 33
Operating system	Android 9	Android 8.1	Android 10	Android 9		Windows 10 Pro	Windows 10 Pro	Windows 10 Pro	Windows 10 Pro	Windows 10 Pro
Processor	Qualcomm SDM660-2 octa core, 2.2 GHz	Qualcomm MSM8909 quad core, 1.1 GHz	Qualcomm Snapdragon 660 octa core, 2.2 GHz	Qualcomm SDM660-2 octa core, 2.2 GHz		Intel Core i5-7Y57 vPro processor, 1.2 GHz, max. 3.3 GHz	Intel Core i5-7300U vPro processor, 2.6 GHz	Intel Core i5-8365U vPro processor, 1.6 GHz, max. 4.1 GHz	Intel Core i5-7Y57 vPro processor, 1.2 GHz, max. 3.3 GHz	Intel Core i5-7300U vPro processor, 2.6 GHz, max. 3.5 GHz
Display	4.7" HD (1,280 × 720), daylight-readable touchscreen, capacitive multi-touchscreen	5" HD (1,280 × 720), daylight-readable touchscreen, capacitive multi-touchscreen	7" WXGA (1,280 × 800), daylight-readable capacitive multi-touchscreen, up to 500 nits	10.1" WUXGA (1,920 × 1,200), daylight-readable touchscreen, capacitive multi-touchscreen		7" HD (1,280 × 800), anti-glare, daylight-readable touchscreen, capacitive multi-touchscreen	10.1" (1,920 × 1,200) HD, 800 nits, anti-glare, capacitive multi-touchscreen	14" TFT LCD HD (1,366 × 768), optional 1,000 nits full HD (1,920 × 1,080), optional 1,000 nits full HD Touchscreen (1,920 × 1,080)	10.1" TFT full HD touchscreen (1,920 × 1,200), optional dual touch touchscreen	12.0" TFT QHD touchscreen (2,160 × 1,440)
Memory	3 GB RAM, 32 GB eMMC	2 GB RAM, 16 GB eMMC	4 GB RAM, 64 GB eMMC	4 GB RAM, 64 GB eMMC		4 GB RAM expandable to 8 GB, 128 GB SSD expandable to 256 GB, 8 GB/256 GB on a project basis	8 GB RAM, 256 GB SSD	8 GB RAM, expandable to 64 GB, 256 GB SSD, optional second SSD	8 GB RAM, 256 GB SSD	8 GB RAM, expandable to 16 GB, 256 GB SSD
Keyboard	Digital keyboard	Digital keyboard	Digital keyboard	Digital keyboard		Digital keyboard	Digital keyboard	Keyboard, optional touchscreen	Removable keyboard	Removable keyboard
Extens	Integrated barcode scanner	Integrated barcode scanner	2D barcode reader	2D barcode reader, Smart Card reader		Optional: 1D/2D barcode reader, serial port, Smart Card Reader, NFC, thermal camera, real sense camera	Optional USB 2.0, or serial, or microSD-Slot, or Smart Card reader	Options: zweiter Akku, Smart Card reader, HF-RFID, fingerprint reader, DVD-Multi- or BluRay-Drive, separate GPU, second LAN, fourth USB, external RAM (8 or 16 GB), second SSD (256 GB, 512 GB or 1 TB)	Options: NFC, 1D/2D barcode reader, Smart Card reader, fingerprint reader	Optional 2D barcode scanner, optional Smart Card reader ×1, optional fingerprint reader 1×
I/O interfaces	5 MP webcam, 8 MP camera, micro USB 2.0 ×1, Audio ×1	8 MP camera, micro USB 2.0 ×1, Audio ×1	5 MP front camera, 13 MP camera, USB-C 3.0 ×1, Micro SD ×1, Audio ×1	5 MP camera, 8 MP camera, USB-C 3.0 ×1, USB-A 2.0 ×1, Micro SD ×1, Audio ×1		2 MP webcam, 8 MP front camera, Audio ×1, USB 3.0 ×1	2 MP camera, 8 MP autofocus camera, USB 3.0 1×, HDMI 1×, Audio 1×	Audio 1×, DC input 1×, USB 3.1 2×, USB type C 3.1 1×, microSD-Slot 1×, HDMI 1×, optional dual passthrough 1×, optional VGA, optional RS-232, optional Ethernet, optional rugged USB 2.0	Audio 1×, DC input 1×, Ethernet (tablet 1×, keyboard 1×), USB 3.0 (tablet 1×, keyboard 2×), USB 2.0 (keyboard 1×), RS-232 (keyboard 1×), HDMI (tablet 1×, keyboard 1×), VGA (1× tablet), optional RS-232, optional USB 2.0	Audio 1×, DC input 1×, Ethernet (tablet 1×, keyboard 1×), USB 3.0 (tablet 2×, keyboard 1×), USB 2.0 (keyboard 1×), RS-232 (1× keyboard), HDMI (1× tablet, 1× keyboard), optional RS-232, optional USB 2.0
Communication interfaces	WLAN 802.11 ac, Bluetooth 5.0, GPS, optional 4G LTE	WLAN 802.11 a/b/g/n, Bluetooth 4.2, GPS, optional 4G LTE	WLAN 802.11 a/c, Bluetooth 5.1, GPS, optional 4G LTE	WLAN 802.11 ac, Bluetooth 5.0, GPS, optional 4G LTE		Optional Ethernet, WLAN dual band Wireless-AC 8265, Bluetooth (v4.1), optional 4G LTE, optional GPS	Optional Ethernet, WLAN dual band Wireless-AC 8265, Bluetooth (v4.1), optional 4G LTE	Intel Dual Band Wireless-AC 9560, Bluetooth (5.0), optional GPS, 4G LTE, HDMI, microSD	Intel dual band Wireless-AC 8265, Bluetooth (4.1), optional GPS, 4G LTE	Intel dual band Wireless-AC 8265, Bluetooth (4.1), optional GPS, 4G LTE
Dimensions (W × D × H)	74 × 157 × 31 mm	75 × 154 × 13.1 mm	193 × 131 × 22.9 mm	272 × 196 × 16.5 mm		203 × 18 × 132 mm	270 × 188 × 19 mm	345 × 272 × 32,8 mm	272 × 233 × 35,7 mm	313 × 288,4 × 46,1 mm
Weight	0.274 kg	0.240 kg	0.505 kg (WiFi) 0.514 kg (4G)	0.885 kg		0,540 kg	1,1 kg	2,08 kg	1,89 kg	2,76 kg
Rugged features	MIL-STD-810G and IP68	MIL-STD-810G and IP68	MIL-STD-810H and IP65	MIL-STD-810G and IP65		MIL-STD-810G and IP65	MIL-STD-810G and IP65	MIL-STD-810H, IP53	MIL-STD-810G, IP65	MIL-STD-810G, IP65
Environmental specifications	Operation: -20 to +50° C	Operation: -10 to +50° C Storage: -30 to +70° C*	Operation: -20 to +50° C	Operation: -20 to +50° C		Operation: -29 to +60° C Storage: -51 to +71° C	Operation: -29 to +60° C Storage: -51 to +71° C	Operation: -29 to +60° C	Operation: -29 to +60° C, Storage: -51 to +71° C	Operation: -29 to +60° C, Storage: -51 to +71° C