

PANASONIC TOUGHBOOK® FAMILY QUICK REFERENCE GUIDE



	TOUGHBOOK FZ-Q2	TOUGHBOOK 54	TOUGHBOOK FZ-G1	TOUGHBOOK FZ-M1	TOUGHBOOK FZ-A2	TOUGHBOOK FZ-B2	TOUGHBOOK 20	TOUGHBOOK 33	TOUGHBOOK 31	TOUGHBOOK FZ-F1 / N1	TOUGHBOOK FZ-E1 / X1
PERFORMANCE FEATURE											
Operating System	Windows 10 Pro (available Windows 7 Professional downgrade option)	Windows 10 Pro (available Windows 7 Professional downgrade option)	Windows 10 Pro (available Windows 7 Professional downgrade option)	Windows 10 Pro (available Windows 7 Professional downgrade option)	Android 6.0.1	Android 6.0.1	Windows 10 Pro (available Windows 7 Professional downgrade option)	Windows 10 Pro (available Windows 7 Professional downgrade option)	Windows 10 Pro (available Windows 7 Professional downgrade option)	Windows 10 IoT Mobile Enterprise (FZ-F1) Android 5.1.1 (FZ-N1)	Windows Embedded 8.1 Handheld (FZ-E1) Android 5.1.1 (FZ-X1)
2-in-1	•						•	•			
Touch Display	Multi Touch	Optional Gloved Multi Touch	Multi Touch + Digitizer	Multi Touch	Multi Touch	Multi Touch	Multi Touch or Multi Touch + Digitizer	Multi Touch + Digitizer	Touchscreen	Multi Touch	Multi Touch
Supports Gloved Touch		Select models	•	•	•	•	•	•	•	•	•
DVD Drive		Optional							Optional		
Screen Size	12.5" HD	14" HD (FHD 1080p Touch and Performance models)	10.1" WUXGA	7" WXGA	10.1" WUXGA	7" WXGA	10.1" WUXGA	12.0" QHD	13.1" XGA	4.7" HD	5" HD
CPU	Intel® Core™ m5-6Y57	Intel® Core™ i5-6300U (i7 optional)	Intel® Core™ i5-6300U (i7 optional)	Intel® Core™ m5-6Y57	Intel® Atom™ x5-Z8550	Intel® Atom™ x5-Z8550	Intel® Core™ m5-6Y57	Intel® Core™ i5-6300U, i5-7300U (i7 optional)	Intel® Core™ i5-5300U (i7 optional)	Qualcomm® MSM8974AB	Qualcomm® MSM8974AB (FZ-E1) Qualcomm® APQ8064T (FZ-X1)
Dedicated Graphics		• (Performance model)									
Base Drive	128 GB SSD	500 GB HDD 7200rpm (5400rpm Lite model)	256 GB SSD	256 GB SSD	32 GB Flash	32 GB Flash	128 GB SSD	256 GB SSD	500 GB HDD (7200rpm)	16 GB Flash	32 GB Flash
Optional 2nd Drive		• ²									
Memory	8 GB	4-16 GB ³ (8-16 GB Performance model)	8 GB	8 GB	4 GB	2 GB	8-16 GB	8-16 GB	4-16 GB	2 GB	2 GB
Weight (lbs.)	2.3	4.2-4.6	2.4	1.2	1.9	1.2	3.9	6.1 (with Premium Keyboard)	7.9	0.6	0.9
Battery Life ¹	9 hours	Up to 11 hours (up to 18 hours with optional 2nd battery)	14 hours (28 hours with optional battery)	9 hours (16 hours with optional battery)	9 hours	8 hours (16 hours with optional battery)	10 hours (20 hours with optional 2nd battery)	10 hours (20 hours with optional battery)	18 hours (27 hours with optional 2nd battery)	8 hours of Continuous use (16 hours with optional battery)	14 hours (Continuous use)
Hot-swappable Battery		Optional	Optional		•	•	Optional				•
RUGGED FEATURES											
Storage Drive Heater	Optional	•	•	•	•	•	•	•	•		
Backlit Keyboard	•	• ²	N/A	N/A	N/A	N/A	•	•	•	N/A	N/A
Fanless	•			•	•	•	•	•	•	•	•
Covered Ports	•	•	•	•	•	•	•	•	•	•	•
User-removable Hard Drive		• (Primary drive)							•		
User-removable Battery		•	•	•	•	•	•	•	•	•	•
Hand Strap/Handle	Optional	•	Optional	•	•	•	•	Optional	•	Optional	Optional
Shock-mounted HDD or SSD/Flash	•	•	•	•	•	•	•	•	•	•	•
Magnesium Alloy Casing or Chassis	•	•	•	•	•	•	•	•	•	•	•
Spill-resistant Keyboard	•	•	N/A	N/A	N/A	N/A	•	•	•	N/A	N/A
IP Certified ³	IP5x	IP51	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP67	IP68
MIL-STD-810G Certified ⁴	•	•	•	•	•	•	•	•	•	•	•
MIL-STD-810G Drop Rating ³	2.5 ft (Tablet only)	3 ft	4 ft	5 ft	5 ft	5 ft	4 ft (5 ft Tablet only)	4 ft (5 ft Tablet only)	5 ft	6 ft	10 ft
3-year Warranty	•	•	•	•	•	•	•	•	•	•	•
Outdoor Viewability	Basic	Good (Select models)	Good	Good	Good	Good	Good	Superior	Superior	Good	Good
WIRELESS FEATURES											
Antenna Pass Through		Optional ²	•	Optional	Optional	Optional	Optional ²	•	•		
Dedicated GPS		Optional ²	Optional	Optional	Optional	Optional	Optional	•	Optional	•	•
Mobile Broadband	Optional 4G LTE Multi Carrier (with satellite GPS)	Optional 4G LTE Multi Carrier (with satellite GPS)	Optional 4G LTE Multi Carrier (with satellite GPS)	Optional 4G LTE Multi Carrier (with satellite GPS)	Optional 4G LTE Multi Carrier (with satellite GPS)	Optional 4G LTE Multi Carrier (with satellite GPS)	Optional 4G LTE Multi Carrier (with satellite GPS)	Optional 4G LTE-Advanced Multi Carrier (with satellite GPS)	Optional 4G LTE Multi Carrier (with satellite GPS)	4G LTE AT&T/Verizon (FZ-N1)	4G LTE AT&T/Verizon
Wi-Fi	•	•	•	•	•	•	•	•	•	•	•
Bluetooth®	•	•	•	•	•	•	•	•	•	•	•

¹ Battery life, unless otherwise stated, is based on MobileMark.

² Not available on Lite model.

³ Tested by a national, independent, third-party lab following MIL-STD-810G Method 516.6 Procedure IV for transit drop and IEC 60529 Sections 13.4, 13.6.2, 14.2.5 and 14.3 for IP65.

