

COMPUTER PRODUCTS BY PANASONIC

Transforming the way businesses work



TABLETS



CF-D1 13.3" FULLY RUGGED WINDOWS TABLET



FZ-G1 10.1" FULLY RUGGED WINDOWS TABLET

Mobile Computing Platform / CPU	Intel® Core™ i5-6300U vPro™ processor {2.4GHz up to 3.0GHz (with Turbo Boost), 3 MB Intel® Smart Cache}	Intel® Core™ i5-7300U vPro™ processor {2.6GHz up to 3.5GHz (with Turbo Boost), 3 MB Intel® Smart Cache}
Operating System	Windows 10 Pro	Windows 10 Pro
Memory & Storage	4GB RAM (max. 16GB) 500GB HDD	8GB RAM 256GB SSD
Display	13.3" Active Matrix (TFT) colour LCD 1366 × 768 pixels [HD] with resistive touchscreen (up to 400cd/m ²)	10.1" Active Matrix (TFT) IPS pro next colour LCD, 1920 × 1200 pixels, WUXGA (up to 800cd/m ²) with circular polariser 10 finger capacitive touchscreen and digitiser Intel® HD Graphics 60
Camera	Rear: 5MP optional	Front: 2MP Rear: 8MP with LED light
Expansion Slots	PC Card: ×1, Type I or II, Allowable current 3.3V: 400mA, 5V: 400mA ExpressCard: ×1, ExpressCard /34 or /54 SD/SDXC Memory Card: ×1 RAM Module: ×1 DDR3 200-pin SO-DIMM	MicroSD/SDXC Memory Card: ×1 optional (configuration port)
Interfaces	Serial: ×1 VGA: ×1 optional ⁵ (eliminates serial) Headphone: ×1 Microphone: ×1 DC Input: ×1 USB 2.0: ×2 USB 3.0: ×1 4th USB: ×1 optional ⁵ (Modular Bay Port) Rugged USB: 2.0 ×1 or ×2 optional ⁵ (Modular Bay Port) LAN: ×1, 2nd LAN optional ⁵ (Modular Bay Port) Industry Cradle: ×1	Headset: ×1 HDMI: ×1 DC Input: ×1 USB 3.0: ×1 LAN: ×1 standard (configuration port) USB 2.0: ×1 optional (configuration port) Serial: ×1 optional (configuration port) Port Replicator: ×1 External Antenna Connector: ×1 FLIR Thermal Imaging: ×1 optional (configuration port)
Connectivity	Bluetooth®: Version 4.1 + EDR Class 1 Wireless LAN: Intel® Dual Band Wireless-AC 8260 LAN: IEEE 802.3 10Base-T / IEEE 802.3u 100Base-TX / IEEE 802.3ab 1000Base-T (2nd LAN 100MBit optional ⁵)	Bluetooth®: Version 4.1 + EDR Class 1 Wireless LAN: Intel® Dual Band Wireless-AC 8265 LAN: IEEE 802.3 10 Base-T / IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T optional
Power	AC Adaptor: Input: 100-240V AC, 50Hz/60Hz; Output: 15.6V DC, 7.05A Battery: Li-Ion (10.8V, 6.2Ah) Battery Life: Approx. 10 hours (Mobile Mark™ 2014)	AC Adaptor: Input: 100-240V AC, 50Hz/60Hz; Output: 16V DC, 4.06A Battery: Li-Ion (11.1V, 4200mAh), user replaceable Battery Life: Approx. 11 hours (Mobile Mark™ 2014) Hot Swap Battery: Optiona
Security Features	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot Smartcard Reader optional	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot
Dimensions (W × H × D) & Weight	349mm × 46mm × 244mm {13.7" × 1.8" × 9.6"} 2.25kg {4.96lb}	270mm × 19mm × 188mm {10.6" × 0.75" × 7.4"} 1.1kg {2.43lb}
Options for Integration	4G LTE, GPS	4G LTE, GPS, Smart Card Reader
Ruggedisation	MIL-STD 810G certified ⁴ Water resistance test: IEC529 (JIS C0920) IPX5 ⁴ Dust resistance test: IEC529 (JIS C0920) IP6X ⁴ Gravity drop resistance test: 90cm drop ⁴ Operating temperature: -10°C to 50°C ⁴	MIL-STD 810G certified ⁴ Water resistance test: IEC529 (JIS C0920) IPX5 ⁴ Dust resistance test: IEC529 (JIS C0920) IP6X ⁴ Gravity drop resistance test: 180cm drop ⁴ Operating temperature: -29°C to 60°C ⁴

TABLETS



FZ-A2

10.1" FULLY RUGGED ANDROID TABLET



FZ-B2

7" FULLY RUGGED ANDROID TABLET

Mobile Computing Platform / CPU	Intel® Atom™ x5-Z8550 processor (1.44GHz to 2.4GHz, 2MB Cache)	Intel® Atom™ x5-Z8550 processor (1.44GHz to 2.4GHz, 2MB Cache)
Operating System	Android™ 6.0	Android™ 6.0
Memory & Storage	4GB RAM 32GB eMMC	2GB RAM 32GB eMMC
Display	10.1 Active Matrix (TFT) IPS colour LCD, 1920 × 1200 pixels, WUXGA (up to 800cd/m ²) Anti Glare, Anti Reflection 10 finger capacitive touchscreen	7" Active Matrix (TFT) colour LCD 1280 × 800 pixels, WXGA (up to 500cd/m ²) 10 finger capacitive touchscreen
Camera	Front: 2MP Rear: 8MP with LED light	Front: 2MP Rear: 8MP with LED light
Expansion Slots	MicroSDHC Memory Card: ×1 (max. 32GB)	MicroSDHC Memory Card: ×1 (max. 32GB)
Interfaces	Headset: ×1 DC Input: ×1 USB 3.0: ×1 USB 3.1 type C OTG: ×1 HDMI: ×1 USB 2.0: ×1 optional (configuration port) 2D Barcode Reader: ×1 optional (configuration port) Smartcard Reader: ×1 optional (business expansion module) Port Replicator: ×1 External Antenna Connector: ×1 optional	Headset: ×1 DC Input: ×1 USB 3.0: ×1 USB 3.1 type C OTG: ×1 Port Replicator: ×1 2D Barcode Reader: ×1 optional (configuration port) Smartcard Reader: ×1 optional (business expansion module) Port Replicator: ×1 External Antenna Connector: ×1 optional
Connectivity	Bluetooth®: Version 4.2 + EDR Class 1 Wireless LAN: Intel® Dual Band Wireless-AC 8260 Dedicated GPS	Bluetooth®: Version 4.2 + EDR Class 1 Wireless LAN: Intel® Dual Band Wireless-AC 8260 Dedicated GPS
Power	AC Adaptor: Input: 100V-240V AC, 50Hz/60Hz, Output: 16V DC, 4.06A Battery: Li-Ion (11.4V, 2600mAh), user replaceable Battery Life: Approx. 9 hours Hot Swap Battery: Optional	AC Adaptor: Input: 100V-240V AC, 50Hz/60Hz; Output: 16V DC, 3.75A Battery: Li-Ion (7.2V, 3220mAh), user replaceable Battery Life: Approx. 8 hours Hot Swap Battery: Optional via business expansion module
Security Features	Optional Smartcard Reader	Integrated hardware security lock slot Optional Smartcard Reader
Dimensions (W × H × D) & Weight	272mm × 16.4mm × 196mm {10.71" × 0.65" × 7.72"} 880g {1.94lb}	203mm × 18mm × 132mm {7.98" × 5.20" × 0.71"} 540g {1.2lb}
Options for Integration	4G LTE	4G LTE
Ruggedisation	MIL-STD 810G certified ⁴ Water resistance test: IEC529 (JIS C0920) IPX5 ⁴ Dust resistance test: IEC529 (JIS C0920) IP6X ⁴ Gravity drop resistance test: 150cm drop ¹ Operating temperature: -29 °C to 60 °C ⁴	MIL-STD 810G certified ⁴ Water resistance test: IEC529 (JIS C0920) IPX5 ⁴ Dust resistance test: IEC529 (JIS C0920) IP6X ⁴ Gravity drop resistance test: 150cm drop ¹ Operating temperature: -29 °C to 60 °C ⁴

TABLETS



FZ-M1

7" FULLY RUGGED WINDOWS TABLET



FZ-L1

7" FULLY RUGGED ANDROID TABLET

Mobile Computing Platform / CPU	Intel® Core™ i5-7Y57 vPro™ processor (1.2GHz to 3.3GHz (with Turbo Boost), 4MB Intel® Smart Cache) (Standard Model) or Intel® Celeron™ N4100 processor (1.1GHz to 2.4GHz (with Turbo Boost), 4MB Cache) (Value Model)	Qualcomm® MSM8909 1.1GHz Quad Core
Operating System	Windows 10 Pro	Android™ 8.1
Memory & Storage	4GB RAM (max. 8GB), 128GB SSD (Standard Model) or 4GB RAM (max. 4GB), 128GB SSD (Value Model)	2GB RAM 16GB eMMC
Display	7" Active Matrix (TFT) colour LCD 1280 × 800 pixels, WXGA (up to 700cd/m ²) 10 finger capacitive touchscreen	7" HD (1280 × 720 pixels) sunlight-readable display with Glove & Rain mode (up to 350cd/m ²) 10 finger capacitive touchscreen
Camera	Front: 2MP Rear: 8MP with LED light	Rear: 8MP with LED light
Expansion Slots	MicroSD/SDXC Memory Card: ×1	MicroSD/SDXC Memory Card: ×1
Interfaces	Headset: ×1 DC Input: ×1 USB 3.0: ×1 Serial: ×1 (configuration port) LAN: ×1 optional (configuration port) 2D Barcode Reader: ×1 optional (configuration port) Smartcard Reader: ×1 optional (business expansion module) UHF RFID: ×1 optional (business expansion module) Port Replicator: ×1 External Antenna Connector: ×1 optional FLIR Thermal Imaging: ×1 optional (business expansion module) Intel® RealSense: ×1 optional (business expansion module)	Headset: ×1 Micro USB 2.0: ×1 Docking connector: ×1 2D Barcode Reader: ×1 landscape optional
Connectivity	Bluetooth®: Version 4.1 + EDR Class 1 Wireless LAN: Intel® Dual Band Wireless-AC 8265 LAN: IEEE 802.3 10Base-T / IEEE 802.3u 100Base-TX / IEEE 802.3ab 1000Base-T optional	Bluetooth®: Version 4.2 Class 1 Wireless LAN: IEEE802.11 a/b/g/n/d/h/i/r Data (optional): 4G LTE, HSPA+, UMTS, EDGE, GPRS, GSM Dual micro SIM (Single standby) GPS: 2m CEP50 (±2 to 4m), GLONASS NFC: Built-in (Type A, B, Felica, ISO 15693)
Power	AC Adaptor: Input: 100V-240V AC, 50Hz/60Hz; Output: 16V DC, 4.06A Battery: Li-Ion (7.2V, 3220mAh), user replaceable Battery Life: Approx. 8 hours (Mobile Mark™ 2014) Hot Swap Battery: Optional via business expansion module	AC Adaptor: Input: 100V-240V AC, 50Hz/60Hz; Output: 5V DC, 1.8A USB Standard battery: Li-Ion 3.8V, 3200mAh (Warm swappable) Battery Life: up to 12 hours continuous data access Battery Charging Time: Full charge in approx. 2.5 hours with Cradle / Approx. 4 hours via USB cable
Security Features	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot	Built-in ARM® TrustZone®
Dimensions (W × H × D) & Weight	203mm × 18mm × 132mm {7.98" × 5.20" × 0.71"} 540g {1.2lb}	193mm × 131mm × 13/30mm (barcode reader option) {7.6" × 5.2" × 0.5"} 480g {1.06lb}
Options for Integration	4G LTE, GPS	4G LTE
Ruggedisation	MIL-STD 810G certified ⁴ Water resistance test: IEC529 (JIS C0920) IPX5 ⁴ Dust resistance test: IEC529 (JIS C0920) IP6X ⁴ Gravity drop resistance test: 180cm drop ⁴ Operating temperature: -29°C to 60°C ⁴	MIL-STD 810G Water resistance test: IEC529 (JIS C0920) IPX7 ¹ Dust resistance test: IEC529 (JIS C0920) IP6X ¹ Gravity drop resistance test: 150cm drop ¹ Operating temperature: -10°C to 50°C ¹

HANDHELDS



FZ-T1

5" FULLY RUGGED ANDROID HANDHELD



FZ-N1

4.7" FULLY RUGGED ANDROID HANDHELD

Mobile Computing Platform / CPU	Qualcomm® MSM8909 1.1GHz Quad Core	Qualcomm® SDM660-2 64bit 2.2GHz x4 +1.8GHz x4 Octa Core
Operating System	Android™ 8.1	Android™ 8.1
Memory & Storage	2GB RAM 16GB eMMC	3GB RAM 32GB eMMC
Display	5" HD (1280x720 pixels) sunlight-readable display with Glove & Rain mode (up to 420cd/m²) 10 finger capacitive touchscreen	4.7" HD (1280 × 720 pixels) sunlight-readable display with Glove & Rain mode (minimum 500cd/m²) 10 finger capacitive touchscreen As default supports optional Passive and optional Active pen (For Bio-metric signatures)
Camera	Rear: 8MP with LED light	Front: 5MP Rear: 8MP with LED Flash
Expansion Slots	MicroSD/SDXC Memory Card: x1	MicroSDXC Memory Card: x1
Interfaces	Headset: x1 Micro USB 2.0: x1 Docking connector: x1	Headset: x1 Micro USB 2.0: x1 Docking connector: x1
Connectivity	Bluetooth®: Version 4.2 Class 1 Wireless LAN: IEEE802.11 a/b/g/n/d/h/i/r Data + Voice (optional): 4G LTE, HSPA+, UMTS, EDGE, GPRS, GSM Dual micro SIM (Single standby) GPS: 2 m CEP50 (±2 to 4 m), GLONASS NFC: Built-in (Type A, B, Felica, ISO 15693)	Bluetooth®: Version 5 Class 1 Wireless LAN: IEEE802.11 a/b/g/n/ac/d/h/i/k/r/v/w Voice & Data (optional): 4G LTE, HSPA+, UMTS, EDGE, GPRS, GSM Dual micro SIM (Single standby) GPS: 2m CEP50 (±2 to 4 m), GLONASS NFC: Built-in (Type A, B, Felica, ISO 15693)
Power	AC Adaptor: Input: 100V-240V AC, 50Hz/60Hz; Output: 5V DC, 1.8A USB Standard battery: Li-Ion 3.8V, 3200mAh (Warm swappable) Battery Life: up to 12 hours continuous data access Battery Charging Time: Full charge in approx. 2.5 hours with Cradle / Approx. 4 hours via USB cable	AC Adaptor: Input: 100V-240V AC, 50Hz/60Hz; Output: 16V DC, 3.75A Standard battery: Li-Ion 3.8V, 3200mAh (Warm swappable) Optional extended battery: Li-Ion 3.8V, 6400 mAh (Warm swappable) Battery Life (Standard/Extended battery): up to 12 hours / 19 hours of continuous data access up to 27 hours / 44 hours talk time up to 700 hours / 1400 hours standby time Battery Charging Time: Full charge in approx. 2 hours with Standard battery / Approx. 4 hours with optional extended battery
Security Features	Built-in ARM® TrustZone®	FIPS140-2 level-1 compliant & Built-in ARM® TrustZone®
Dimensions (W × H × D) & Weight	75mm × 154mm × 13.1/17.5mm (barcode reader section) {3.0" × 6.1" × 0.5"/0.7" (barcode reader section)} 230g {0.51lb}	74mm × 156mm × 16.3mm/31mm (barcode reader section) {2.9" × 6.1" × 0.6"/1.2"} (barcode reader section) 274g {0.60lb}
Options for Integration	4G LTE	4G LTE
Ruggedisation	MIL-STD 810G Water resistance test: IEC529 (JIS C0920) IPX8¹ Dust resistance test: IEC529 (JIS C0920) IP6X¹ Gravity drop resistance test: 150cm drop¹ Operating temperature: -10°C to 50°C¹ 1,000 drops (500 tumbles), 1.0m	MIL-STD 810G certified⁴ Water resistance test: IEC529 (JIS C0920) IPX8⁴ Dust resistance test: IEC529 (JIS C0920) IP6X⁴ Gravity drop resistance test: 210cm drop⁴ Operating temperature: -20°C to 50°C⁴ 2,000 drops (1,000 tumbles), 1.0m Raised bezel for display protection

NOTEBOOKS



CF-31

13.1" FULLY RUGGED CLAMSHELL NOTEBOOK



CF-54

14" SEMI RUGGED CLAMSHELL NOTEBOOK



Mobile Computing Platform / CPU	Intel® Core™ i5-5300U vPro™ processor (2.3 GHz up to 2.9 GHz (with Turbo Boost), 3 MB Intel® Smart Cache)	Intel® Core™ i5-7300U vPro™ processor (2.6GHz up to 3.5GHz (with Turbo Boost), 3 MB Intel® Smart Cache)
Operating System	Windows 10 Pro	Windows 10 Pro
Memory & Storage	4GB RAM (max. 16GB) 500GB HDD (SATA)	Entry model: 4GB RAM (max. 16GB), 500GB HDD Mid model: 4GB RAM (max. 16GB), 256GB SSD Premium model: 8GB RAM (max. 16GB), 256GB SSD
Display	13.1" LCD sunlight-viewable XGA Active Matrix (TFT) colour LCD (up to 1,200cd/m ²) with circular polariser; concealed mode	14" Active Matrix (TFT) display Entry model: HD (1366 x768) Mid model: Full HD IPS (1920 x1080) Premium model: Full HD IPS (1920 x1080) with 10 finger capacitive touchscreen (up to 1,000cd/m ²)
Camera		Front: 2MP optional
Expansion Slots	SD/SDXC Memory Card: x1 RAM module: x1 DDR3L 200-pin SO-DIMM	SD/SDXC Memory Card: x1 RAM Module: x2, DDR3L 200-pin SO-DIMM, one slot occupied Config Area: DVD Multi Drive (as standard) or PC Card (Type I or Type II) or 2nd battery (6 cell) or Smart card reader
Optical drive	DVD Multi Drive (optional, Multimedia pocket)	DVD Multi Drive (as standard, in the Config area)
Interfaces	Serial: x1 HDMI: x1 VGA: x1 Headphone: x1 Microphone: x1 DC input: x1 jack USB 2.0: x3 USB 3.0: x1 LAN: x1 (2nd LAN optional, project based) Firewire: optional x1 (project based) Port Replicator: x1 External Antenna Connector: x1	USB 3.0: x3 HDMI: x1 Serial: x1 VGA: x1 LAN: x1 standard, x1 optional (exclusive option at configuration port) Headset: x1 DC Input: x1 jack Port Replicator: x1 USB 2.0: x1 (exclusive option at configuration port) Dedicated GPS: x1 (exclusive option at configuration port) Rugged USB 2.0: x1 (exclusive option at configuration port) External Antenna Connector: x1 optional
Connectivity	Bluetooth®: Version 4.0 + EDR Class 1 Wireless LAN: Intel® Dual Band Wireless-AC 7265 LAN: IEEE 802.3 10Base-T / IEEE 802.3u 100Base-TX / IEEE 802.3ab 1000Base-T (2nd Gigabit LAN project based)	Bluetooth®: Version 4.1 + EDR Class 1 Wireless LAN: Intel® Dual Band Wireless-AC 8265 LAN: IEEE 802.3 10Base-T / IEEE 802.3u 100Base-TX / IEEE 802.3ab 1000Base-T
Power	AC Adaptor: Input: 100V-240V AC, 50Hz/60Hz; Output: 15.6V DC, 7.05A Battery: Li-Ion (10.65V, typical 8550mAh / minimum 8100mAh) Battery life: Approx. 18 hours (Mobile Mark™ 2007)	AC Adaptor: Input: 100V-240V AC, 50Hz/60Hz, Output: 15.6V DC, 7.05 A Battery: Li-Ion 6 cell Battery Life: Approx. 10 hours (Mobile Mark™ 2014) Approx. 17 hours (with optional 2nd battery) Hot Swap Battery: optional
Security Features	TPM (Trusted Platform Module), TCG V1.2 Integrated hardware security lock slot	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot
Dimensions (W x H x D) & Weight	302mm x 73.5mm x 292mm {11.9" x 2.9" x 11.5"} 3.72kg {8.2lb}	345mm x 272mm x 39.0mm {13.6" x 10.7" x 1.54"}, with extended cover HD model: 1.99kg {4.39lb} FullHD model w/o touchscreen: 1.9kg {4.19lb} FullHD model with touchscreen: 2.1kg {4.63lb}
Options for Integration	4G LTE, GPS, fingerprint reader, smart card reader	4G LTE, GPS, HF RFID, fingerprint reader, smart card reader, bridge battery, dual pass through antenna
Ruggedisation	MIL-STD 810G certified ⁴ Water resistance test: IEC529 (JIS C0920) IPX5 ⁴ Dust resistance test: IEC529 (JIS C0920) IP6X ⁴ Gravity drop resistance test: 180cm ⁴ Operating temperature: -29°C to +60°C ⁴	MIL-STD 810G certified ¹ Water resistance test: IEC529 (JIS C0920) IPX1 ⁴ Dust resistance test: IEC529 (JIS C0920) IP5X ⁴ Gravity drop resistance test: 76cm ¹ Operating temperature: -10°C to 50°C ¹



CF-33

12" FULLY RUGGED 2-IN-1 DETACHABLE NOTEBOOK



CF-20

10.1" FULLY RUGGED 2-IN-1 DETACHABLE NOTEBOOK

Mobile Computing Platform / CPU	Intel® Core™ i5-7300U vPro™ processor (2.6GHz up to 3.5GHz (with Turbo Boost), 3 MB Intel® Smart Cache)	Intel® Core™ i5-7Y57 vPro™ processor (1.2GHz to 3.3GHz (with Turbo Boost), 4MB Intel® Smart Cache)
Operating System	Windows 10 Pro	Windows 10 Pro
Memory & Storage	8GB RAM (4GB or 16GB project based) 256GB SSD	8GB RAM (4GB or 16GB project based) 256 GB SSD
Display	12.0" Active Matrix (TFT) colour LCD, QHD (2160 × 1440 pixels), up to 1200cd/m ² brightness, Aspect ratio 3:2, Anti Reflection with glove and rain modes Dual Touch as standard (10 finger capacitive touchscreen and Digitiser)	10.1 Active Matrix (TFT) IPS colour LCD, 1920 × 1200 pixels, WUXGA (up to 800cd/m ²) Anti Glare, Anti Reflection 10 finger capacitive touchscreen Dual Touch model with Digitiser optional
Camera	Front: 2MP with IR for Windows Hello Rear: 8MP	Front: 2MP Rear: 8MP
Expansion Slots	SD/SDXC Memory Card: ×1 SDXC (Keyboard), ×1 Micro-SDXC (Tablet)	SD/SDXC Memory Card: ×1 SDXC (Keyboard Base), ×1 Micro-SDXC (Main Unit)
Interfaces	Serial: ×1 (Keyboard Base), ×1 optional (Main Unit) HDMI: ×2 (Keyboard Base & Main Unit) VGA: ×1 (Keyboard Base) USB 3.0: ×2 (Keyboard Base), ×1 (Main Unit) USB 2.0: ×1 (Keyboard Base), ×1 optional (Main Unit) Rugged USB: ×1 optional (Main Unit) LAN: ×2 (Keyboard Base & Main Unit) 2D Barcode Reader: ×1 optional (Main Unit) Smartcard Reader: ×1 optional (Main Unit) HF RFID: ×1 optional (Main Unit) Fingerprint Reader: ×1 optional (Main Unit) Port Replicator: ×1 (Keyboard Base) External Antenna Connector: ×1 (Keyboard Base) Headset: ×1 DC Input: ×2 (Keyboard Base & Main Unit)	Serial: ×1 (Keyboard Base), ×1 optional (Main Unit) HDMI: ×2 (Keyboard Base & Main Unit) VGA: ×1 (Keyboard Base) Headset: ×1 DC Input: ×2 Jack (Keyboard Base & Main Unit) USB 2.0: ×1 (Keyboard Base), optional ×1 (Main Unit) USB 3.0: ×2 (Keyboard Base), ×1 (Main Unit) LAN: ×2 (Keyboard Base & Main Unit) 2D Barcode Reader: optional ×1 (Main Unit) Smartcard Reader: optional ×1 (Main Unit) HF RFID: optional ×1 (Main Unit) Fingerprint Reader: ×1 optional (Main Unit) Port Replicator: ×1 External Antenna Connector: ×2 (Keyboard Base & Main Unit)
Connectivity	Bluetooth®: Version 4.1 Class 1 WLAN: Intel® Dual Band Wireless-AC 8265 LAN (Tablet and Keyboard): IEEE 802.3 10Base-T / IEEE 802.3u 100Base-TX / IEEE 802.3ab 1000Base-T	Bluetooth®: Version 4.1 Class 1 Wireless LAN Intel® Dual Band Wireless-AC 8265 LAN IEEE 802.3 10Base-T / IEEE 802.3u 100Base-TX / IEEE 802.3ab 1000Base-T
Power	AC Adaptor: Input: 100V-240V AC, 50Hz/ 60Hz, Output: 15.6V DC, 7.05 A Standard Battery: Li-Ion 11.1V, 1990mAh × 2, user replaceable, hot swappable Extended Battery (Factory option): Li-ion 10.8V, 4120mAh × 2, user replaceable, hot swappable Battery Life (2-in-1 Detachable): Approx. 10 hours; Approx. 20 hours with optional extended battery (Mobile Mark™ 2014) Battery Life (Tablet only): Approx. 11 hours; Approx. 22 hours with optional extended battery (Mobile Mark™ 2014)	AC Adaptor: Input: 100V-240V AC, 50Hz/ 60Hz, Output: 16V DC, 4.06A Battery: Li-Ion (11.4V, 2600mAh), user replaceable Battery Life: Tablet approx. 8.5 hours (Mobile Mark™ 2014); Approx. 17 hours with 2nd battery in Keyboard Base (Mobile Mark™ 2014) Hot Swap Battery: Standard
Security Features	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot
Dimensions (W × H × D) & Weight	2-in-1 Detachable: 313.0 × 288.4 × 46.1mm {12.3" × 11.4" × 1.8"}, 2.761 kg {6.1 lb.} Tablet only version: 308.0 × 243.6 × 21.6mm {12.1" × 9.6" × 0.9"}, 1.527 kg {3.4 lb.}	272mm × 233mm × 33.5mm {10.7" × 9.17" × 1.32"} (Main Unit + Keyboard Base) 272mm × 196mm × 16.4mm {10.7" × 7.7" × 0.65"} (Main Unit) 1.89kg {4.2lb} (Main Unit + Keyboard Base) 950g {2.1lb} (Main Unit)
Options for Integration	4G LTE, GPS	4G LTE, GPS
Ruggedisation	MIL-STD 810G certified ^d Water resistance test: IEC529 (JIS C0920) IPX5 ^d Dust resistance test: IEC529 (JIS C0920) IP6X ^d Gravity drop resistance test: 150cm drop ^d Operating temperature: -29°C to +60°C ^d	MIL-STD 810G certified ^d Water resistance test: IEC529 (JIS C0920) IPX5 ^d Dust resistance test: IEC529 (JIS C0920) IP6X ^d Gravity drop resistance test: 120cm drop ^d Operating temperature: -29°C to +60°C ^d



FZ-Q2

**12.5" SEMI RUGGED 2-IN-1
DETACHABLE NOTEBOOK**



CF-XZ6

**12" BUSINESS RUGGED
2-IN-1 DETACHABLE NOTEBOOK**

Mobile Computing Platform / CPU	Intel® Core™ m5-6Y57 vPro™ processor {1.1GHz to 2.8GHz [with Turbo Boost], 4MB Intel® Smart Cache}	Intel® Core™ i5-7300U vPro™ processor {2.6GHz up to 3.5GHz [with Turbo Boost], 3 MB Intel® Smart Cache}
Operating System	Windows 10 Pro	Windows 10 Pro
Memory & Storage	4GB RAM (max. 8GB project based) 128 GB SSD	8GB RAM (4GB or 16GB project based) 256GB SSD
Display	12.5 Active Matrix (TFT) IPS colour LCD, 1920 × 1080 pixels, FHD, Anti Glare, Anti Reflection 10 finger capacitive touchscreen	12.0" Active Matrix (TFT) colour LCD, QHD (2160 × 1440 pixels) and Anti Reflection screen 10 finger capacitive multi-touch with optional Active pen
Camera	Front: 1080p Rear: 8MP	Front: 2MP with IR for Windows Hello Rear: 8MP with LED light
Expansion Slots	SD/SDXC Memory Card: ×1 Micro-SDXC (Main Unit)	SDXC Card (UHS-I / UHS-II): ×1 (Keyboard Base)
Interfaces	Headset: ×1 USB 3.0: ×1 Serial: ×1 HDMI: ×1 LAN: ×1 DC Input: ×1	USB 3.0: ×3 (Keyboard Base) LAN: ×1 (Keyboard Base) VGA: ×1 (Keyboard Base) HDMI: ×1 (Keyboard Base) Headphone: ×1 (Main Unit) USB 3.1 (Gen1) Type-CTM: ×1 (Main Unit)
Connectivity	Bluetooth®: Version 4.1 Class 1 Wireless LAN: Intel® Dual Band Wireless-AC 8260 LAN: IEEE 802.3 10Base-T / IEEE 802.3u 100Base-TX / IEEE 802.3ab 1000Base-T	Bluetooth®: Version 4.1 Class 1 Wireless LAN: Intel® Dual Band Wireless-AC 8265 LAN (Keyboard Base): 1000Base-T/100Base-TX /10Base-T
Power	AC Adaptor: Input: 100V-240V AC, 50Hz/ 60Hz, Output: 16V DC, 3.75A Battery: Li-Ion (7.6V, 4860mAh) Battery Life: Approx. 9 hours (Mobile Mark™ 2014)	AC Adaptor: Input:100V-240V AC, 50Hz/60Hz, Output:16V DC, 4.06A Main unit battery (Built-in): 4-cell battery, Li-Ion 7.6V, 3540mAh Keyboard Base Battery (End-user removable, Hot swap): 4-cell battery, Li-Ion 7.6V, 5200mAh 2-in-1 Detachable Battery Life: Approx. 14 hours (Mobile Mark™ 2014) Tablet only Battery Life: Approx. 6.5 hours (Mobile Mark™ 2014)
Security Features	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot	TPM (Trusted Platform Module), TCG V2.0 Integrated hardware security lock slot
Dimensions (W × H × D) & Weight	340mm × 220mm × 43mm {13.4" × 8.66" × 1.69"} (Main Unit + Keyboard Base) 340mm × 220mm × 22mm {13.4" × 8.66" × 0.87"} (Main Unit) 1.93kg {4.25lb} (Main Unit + Keyboard Base) 1.09kg {2.40lb} (Main Unit)	2-in-1 Detachable: 288.5mm × 223.7mm × 22mm {11.36" × 8.80" × 0.87"}, Approx. 1.18kg {2.60lb} Tablet only: 286.5mm × 206.2mm × 9.5mm {11.28" × 8.12" × 0.37"}, Approx. 640g {1.41lb}
Options for Integration	4G LTE, -10°C SSD heater (project based)	4G LTE
Ruggedisation	Passed a 76cm free-fall test ² 100kgf pressurised vibration test ³	Passes a 76cm free-fall test ² 100kgf pressurised vibration test ³

¹Tested in Panasonic Factory. ²Config. A: 1x PC Card Type I or II + 1x ExpressCard; Config. B: 2x PC Card Type I or II, no ExpressCard. ³The shock resistance, pressure resistance, and splashproof functions are not a guarantee against damage or malfunction. ⁴Tested by an independent third party lab following MIL-STD-810G and IEC 60529. ⁵Project based. Only one interface can be selected. ⁶Safety Certifications list available at www.toughbook.eu.