DESIGNED TO OUTPERFORM
BUILT TO OUTLAST

SCREEN VISIBILITY
Field productivity demands high brightness displays, low screen reflection, the latest IPS technology, extra-wide viewing angles and high-contrast ratios. Together, they mean Toughbooks deliver more productive all-weather performance.

RELIABILITY & DURABILITY
Fully rugged devices are engineered for IP65 resistance to dust, humidity and water, MIL-STD 810G certifications for drops, shock, vibrations, pressure and temperature, and MIL-STD-461F certification against electromagnetic interference. Panasonic Tough devices are supported with a minimum 3 year warranty, with 4 or 5 year support options.

VEHICLE MOUNTING
Panasonic Tough IT feature specialised vehicle mounts to stay connected to power and applications on the move. Optional Dual Pass Through functionality supports vehicle mounted antennas to connect more effectively, in more places, more often.

SECURITY
All Tough devices include unique features dedicated to enterprise level security, including Intel TPM or ARM TrustZone.

CONNECTIVITY
Toughbooks are purpose built for field connectivity, with configuration options including 4G LTE, Dual Pass Through capabilities, WLAN, Bluetooth, GPS, USB, LAN, Serial and HDMI.

MOBILITY
All tablets claim to offer mobility advantages. The Panasonic Tough range starts from just 240g (FZ-T1) and features the FZ-G1 (world's slimmest, lightest fully-rugged Windows 10 Pro, 10.1" tablet) and the Toughbook CF-20 (world's thinnest, lightest fully rugged Windows 10 Pro, 2-in-1 tablet PC device).

VOICE CAPABILITY
The Toughbook range of Handheld devices features voice capability with 700 to 1000 hours standby time, a triple microphone array, noise cancelling technology and 100 decibel speakers ensuring audio clarity even in noisy outdoor environments.

EASE OF USE
Panasonic's fully-rugged devices feature 10 finger multi-touch screens, which can be used in the rain, in extreme temperatures or while wearing gloves.

EXTENDED BATTERY PERFORMANCE
Long standard battery life, optional high-capacity batteries and hot swap capabilities mean your Panasonic Tough devices are ready when you are. For example, Toughbook CF-20 delivers up to 8.5 hours on one battery, 17 hours on two batteries or unlimited performance with its optional hot swap kit.

*Features vary by model. Please check product brochures and spec sheets at www.panasonic.com.au/toughbook

---

GET TOUGH
ON THE COST OF DOWNTIME

IMPROVED ROI

Panasonic Toughbooks are **LOCAL & GLOBAL LEADERS** in ruggedised devices*[4]

45min
Panasonic Ruggedised Devices **BOOST PRODUCTIVITY** by up to 45 minutes per worker per day*[3]

7 / 10
7 in 10 consumer devices that fail in the field, fail in a protective case*[5]

TCO 15%
Panasonic Ruggedised Devices **LOWER TCO** by over 15% p.a.*[2]

90%
Panasonic Ruggedised Devices **SLASH FAILURE** rates by over 90%*[1]

8 / 10
8 in 10 mobile devices face stressors including heat, cold, falls, weather, dust, vibration, humidity & more*[5]

*[1] Telstra Case Study, "Telco Giant Talks Tough" *[2] Venture Data Corporation, US, 2014 *[3] Ergon Energy Case Study, 2014
*[4] Venture Data Corporation, 2016 *[5] Quantum Market Research Australia, 2015 *[6] WorldSquare Research, 2012

Panasonic BUSINESS   **TOUGHBOOK**   panasonic.com.au/**toughbook**

Panasonic BUSINESS

VERSATILITY & RELIABILITY THAT'S
TOUGH TO BEAT

intel   The PC, Tablet and Handheld Range That's Built for Purpose.   **TOUGHBOOK**

THE TOUGHBOOK FAMILY
BUILT TO WORK WHERE YOU DO

	HANDHELD		TABLET				2-IN-1		NOTEBOOK
	4.7" Fully Rugged Handheld Tablet	5.0" Fully Rugged Handheld Tablet	7" Fully Rugged Tablet (Windows & Android)		10.1" Fully Rugged Tablet (Windows & Android)		10.1" Fully Rugged 2-in-1	12" Fully Rugged 2-in-1	14" Semi-Rugged Notebook
Model	TOUGHBOOK N1	TOUGHBOOK T1	TOUGHBOOK L1	TOUGHBOOK M1	TOUGHBOOK G1	TOUGHBOOK A3	TOUGHBOOK 20	TOUGHBOOK 33	TOUGHBOOK 55
Operating System	Android 9.0	Android 9.0	Android 8.1	Windows 10 Pro	Windows 10 Pro	Android 9.0	Windows 10 Pro	Windows 10 Pro	Windows 10 Pro
Processor	Qualcomm® SDM660 64 bit 2.2GHz + 1.8GHz Octa Core	Qualcomm® MSM8909 1.1GHz Quad Core	Qualcomm® MSM8909 1.1GHz Quad Core	Intel® Core™ i5 7Y57 vPro™	Intel® Core™ i5 7300U vPro™	Qualcomm® SDM660 2.2GHz x4 + 1.8GHz x4 Octa Core	Intel® Core™ i5 7Y57 vPro™	Intel® Core™ i5-10310U vPro™	Intel® Core™ i5-8365U vPro™
Display Size	4.7" HD 1280x720	5" HD 1280x720	7" HD 1280x720	7" WXGA 1280x800	10.1" WUXGA 1920x1200	10.1" WUXGA 1920x1200	10.1" WUXGA 1920x1200	12.0" QHD 2160x1440	14" HD (1366x768) or Full HD (1920x1080)
Display Features	500 cd/m², Glove Touch, Rain Touch	450 cd/m², Glove Touch, Rain Touch	350 cd/m², Glove Touch, Rain Touch	IPS, 700 cd/m², Glove Touch, Rain Touch	IPS, 800 cd/m², Glove Touch, Rain Touch	800cdm², Glove Touch, Rain Touch, Built in NFC	IPS, 800 cd/m², Glove Touch, Rain Touch	1200 cd/m², Glove Touch, Rain Touch	1000 cd/m² (Full HD)
Daylight Readable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Memory	3Gb	2Gb	2Gb	8Gb	8Gb	4Gb	8Gb	8Gb	8Gb
Storage	32Gb eMMC	16GB eMMC	16Gb MMC	128Gb SSD	128Gb SSD	64Gb eMMC	256Gb SSD	512Gb SSD	256Gb SSD
Battery (Std)*	12 Hours (continous data access)	12 Hours (continuous data access) 900 Hours standby time	9 Hours (continuous data access)	8 Hours	13 Hours	9 Hours	8.5 Hours (with Keyboard Base)	10 Hours (with Keyboard Base)	19 Hours
Battery (Optional)*	19 Hours (continuous data access)	-	-	18 Hours	26 Hours	15 Hours	17 Hours	-	38 Hours (2nd battery)
Hot Swappable Battery	Warm Swappable	Warm Swappable	Warm Swappable	Optional	Optional	Yes	Optional	Yes	Optional (with 2nd battery)
Rugged Category	Fully Rugged	Fully Rugged	Fully Rugged	Fully Rugged	Fully Rugged	Fully Rugged	Fully Rugged	Fully Rugged	Semi Rugged
Rugged Testing	MIL-STD-810G, IP66/IP68, 2.1m drop, -20°C to +50°C	MIL-STD 810G, IP66/IP68, 1.5m drop, -10°C to +50°C	MIL-STD 810G, IP65/67, 1.5m drop, -10°C to +50°C	MIL-STD-810G, IP65, 1.8m drop, -10°C to +50°C	MIL-STD-810G, MIL-STD-461F, IP65, 1.2m drop, -20°C to +60°C	MIL-STD-810H, IP65, 1.5m drop, -20°C to +50°C	MIL-STD-810G, IP65, 1.2m drop for Clam Shell, 1.5m drop for Tablet style, -10°C to +50°C, MIL-STD-461F	MIL-STD-810G, IP65, 1.2m drop for Clam Shell, 1.5m drop for Tablet style, -10°C to +50°C, MIL-STD 461G	IP53, 91cm drop, -29°C to +60°C
Chassis	-	-	-	Magnesium alloy chassis encased with ABS and elastomer corner guards	Magnesium alloy chassis encased with ABS and elastomer corner guards	-	Magnesium alloy chassis encased with ABS and elastomer edges	Magnesium alloy chassis encased with ABS and elastomer edges	Magnesium alloy chassis encased with ABS
Dimensions	74mm x 156mm x 16.3mm (31mm for barcode reader section)	75mm x 154mm x 13.1mm/17.5mm (barcode reader section)	193mm x 131 mm x 13mm	203mm x 132mm x 18mm	270mm x 188mm x 19mm	272mm x 196mm x 16.4mm	272mm x 233mm x 33.5mm (Tablet + Keyboard) 272mm x 196mm x 16.4mm (Tablet only)	313mm x 288.4mm x 46.1mm (Tablet + Keyboard) 308mm x 243.6mm x 21.6mm (Tablet only)	345mm x 272mm x 32.8mm
Weight	274g (with Barcode Reader)	240g (with Barcode Reader)	440g	540g	1.1Kg	885g	1.89Kg (Tablet + Keyboard) 950g (Tablet only)	2.54Kg (Tablet + Keyboard) 1.36Kg (Tablet only)	2.08Kg to 2.22 Kg depending on configuration
Configuration Options	Extended Battery	-	Barcode Reader	4G, GPS, Barcode Reader, 2nd USB, Magnetic Stripe Reader, Smartcard Reader, True Serial, NFC, LAN, SD Card, Real Sense/Thermal Camera, RFID	4G, GPS, Barcode Reader, Magnetic Stripe Reader, Smartcard Reader, True Serial, NFC, LAN, SD Card, Thermal Camera, USB 2.0, RFID	Barcode Reader, 2nd USB* (USB 2.0), Smartcard Reader * Standard model includes 1x USB 3.0 and 1x USB 2.0	4G, GPS, Barcode Reader, 2nd USB, Magnetic Stripe Reader, Smartcard Reader, Fingerprint Reader, True Serial, NFC	16GB RAM, 4G, GPS, Barcode Reader, 2nd USB, Smartcard Reader, Fingerprint Reader, True Serial, NFC	User Configurable Options Backlit Keyboard, 8GB / 16GB RAM Universal Bay: Discrete GPU, 2nd SSD, Smartcard Reader, DVD Drive, Blu Ray Drive Front Expansion Slot: 2nd Battery, Fingerprint Reader, Contactless Smartcard Reader, Smartcard Reader Rear Expansion Slot: (VGA & True Serial) + 4th USB 3.1 or 2nd Native GLAN or Rugged USB 2.0

*MobileMark 2014