



# TOUGHPAD FZ-F1

## 4.7" SLIM AND LIGHTWEIGHT HANDHELD TABLET WITH ANGLED REAR BARCODE READER

The Toughpad FZ-F1 with Windows 10 IoT Mobile Enterprise is one of the thinnest and most lightweight handheld tablets in the 4.7" category. The device offers numerous unique features, including an angled rear barcode reader which protects users from repetitive strain and enhances productivity, and an optional passive and active pen for precise handwriting and signature capture.

This cutting-edge device has been designed for mobile workers in the postal and courier services, transportation and logistics, emergency and public safety, utilities, retail, manufacturing and defence sectors.

- Windows 10 IoT Mobile Enterprise
- 4G LTE / 3G data and voice capability
- Integrated 1D/2D angled rear barcode reader
- Qualcomm® MSM8974AB 2.3 GHz Quad-core processor
- 2 GB RAM, 16 GB storage and microSD card slot
- 4.7" HD (1280 x 720) daylight-readable display with glove and rain mode
- Optional passive and active pen for precise signatures
- MIL-STD 810G certified with 1.8-metre drop\* resistance
- IP67 rated (submersible in water up to 1 metre for 30 minutes)
- 8MP rear and 5MP front camera
- User-replaceable battery with warm-swap function
- NFC, Bluetooth 4.1, WiFi, micro USB port and docking connector
- Triple microphones for superior noise suppression
- Dual front speakers delivering in total up to 100 dBA
- FIPS 140-2 level-1 compliant
- ARM® TrustZone® (Built-in), TPM (TCG V2.0 compliant)

\* Tested at Panasonic factory

**TOUGHPAD**

 Windows 10

[www.toughbook.eu](http://www.toughbook.eu)

# A BETTER ANGLE ON BUSINESS

## FULLY FEATURED 4.7" HANDHELD TABLET

The FZ-F1 brings together the best of handheld, smartphone and barcode reader functionality into a single rugged and hard working tablet. Thanks to its fully-rugged design, with MIL-STD-810G certification, IP67 rating, 1.8-metre drop resistance\* and the ability to withstand as many as 1,000 tumbles from a height of 1 metre, the device delivers a long life span and very low TCO. The user-replaceable and warm-swappable battery, combined with a range of accessories such as carry and mounting solutions, make it a truly mobile device.



Mobile Computing Platform	Qualcomm <sup>®</sup> MSM8974AB 2.3 GHz Quad-core processor	
Operating system	Windows 10 IoT Mobile Enterprise	
Display	4.7" HD (1280x720 pixels), 16:9 aspect ratio	
	10 point multi-touch capacitive touchscreen with glove and rain mode	
	Daylight viewable (up to 500 cd/m2)	Anti-reflective and anti-glare screen treatments
	Supports both passive pen* and active pen* as default	
RAM, Storage & expansion	2 GB RAM, 16 GB eMMC and micro SDXC card slot (max. 64 GB)	
Audio	3 mics (2x Front & 1x Rear)	
	2x Loud speakers (in total delivering up to 100 dBA)	
Barcode reader	Angled rear barcode reader with aimer and light	
Camera	Rear:	44 types of 1D/2D barcodes supported 8 MP rear camera with bright LED light (Video: 1920 x 1080 pixels (FHD) 30 fps, Still: 3264 x 2448 pixels (8MP))
	Front:	5 MP (Video: 1920 x 1080 pixels (FHD) 30 fps, Still: 2592 x 1944 pixels (5MP))
Sensors	Ambient light sensor, Digital compass, Gyro sensor, Acceleration sensor	
Power	Battery (Standard / Extended*):	Standard: Li-ion 3.8V, 3,200 mAh (typ.) / Extended*: Li-ion 3.8V, 6,400mAh (typ.)
	User replaceable with warm swap function	
	Battery operating time (Standard / Extended*):	
	Continuous data access time**: up to 10 hours / 20 hours Talk time: up to 24 hours / 48 hours Standby time: up to 630 hours / 1260 hours	
Charging	AC Adapter for charging via micro USB port:	USB charger with micro USB cable (Inbox)
	AC Adapter for cradle and charging Cup:	AC Adapter 16V 3.75A (Optional)
	Charging time with cradle or charging cup:	Approx. 2 hours (Power on, with Standard battery) Approx. 4 hours (Power on, with extended battery)*
Interfaces	micro USB 2.0:	x1 (For charging and data transfer)
	Docking connector:	x1
	Gadget interface:	x1
	Headset jack:	x1 (3.5mm)
Buttons:	User configurable buttons:	x3 (front 'Search' button, left yellow and right yellow buttons)
	Power on/off button:	x1
	Dedicated camera button:	x1 (For rear or front camera)
	Volume buttons:	x2
Wireless	Bluetooth:	v4.1 (class 1)
	WLAN:	IEEE802.11 a/b/g/n/ac
	Voice & Data:	LTE, HSPA+, UMTS, EDGE, GPRS, GSM
	Micro SIM slots:	x2 (Dual SIM Single standby)***
	GPS:	GPS / GLONASS CEP50 (±2 to 4 m)
	NFC:	Yes (Type A, Type B and Felica)
Security	FIPS140-2 level-1 compliant, Built-in ARM <sup>®</sup> TrustZone <sup>®</sup>	
Ruggedness	Fully rugged design with sealed ports, MIL-STD-810G certified, 1.8 metre drop resistant (on concrete)	
	2,000 drops (1,000 tumbles) each 1.0 m {3.2 ft.}	
	Raised bezel for LCD impact protection	
	IP67 rated (submersible in water up to 1 metre for 30 minutes) -10°C to +50°C operating temperature	
Dimensions (WxDxH)	With Standard Battery: 74 mm x 156 mm x 16.3 mm / 31mm (Barcode reader section) {2.9" x 6.1" x 0.6"/1.2" (Barcode reader section) } (without protruding parts) With Extended* Battery: 74 mm x 156 mm x 26 mm / 31mm (Barcode reader section) {2.9" x 6.1" x 1.0"/1.2" (Barcode reader section) } (without protruding parts)	
Weight	With Standard battery: 277g (0.61lb.) With Extended* battery: 368g (0.81 lb.)	
What's inside the box	FZ-F1 Handheld tablet, standard battery, USB charger with micro USB cable and operating instructions manual	
Accessories	Single device cradle	
	Charging cup with stand	
	AC adapter for charging cup with stand (60W)	
	Multi device cradle (4-bay)	
	AC Adaptor for multi device cradle (110W)	
	Hand strap	
	Holster	
	Vehicle mount	
	Standard battery pack (3200mAh)	
	Extended battery pack (6400mAh)	
	Shatterproof film	
	Passive pen	
	Active pen	

\* Optional. \*\*Battery life measurement conditions: Wireless LAN connection enabled; continuous access to the server while browsing; swipe every 1 second; page change every 30 seconds, communication every 30 seconds. \*\*\*Dual SIM - Single Standby (at any given instance only one SIM is active and the device could be switched to the other SIM by GUI).  
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