



## TOUGHPAD FZ-F1

- Windows 10 IoT Mobile Enterprise
- Angled barcode scanner drives productivity
- Industry leading quad-core processor by Qualcomm®
- Dual SIM multi-carrier data support with cellular voice capability<sup>13</sup>
- High volume 100db speaker with noise suppression and echo cancellation microphone
- MIL-STD-810G, 6' Drop, All-weather IP66 and IP68 Dust and Water-resistant design
- Patented rain sensing and glove touch enabled screen technology
- 3 Year Warranty with business class support

6-FOOT  
DROP RATING

IP66

IP68

MIL-STD-  
810G

## FULLY RUGGED SECURE & MANAGABLE HANDHELD FOR THE ENTERPRISE.

Slim, lightweight, powerful, the fully-rugged handheld Panasonic Toughpad F1 is the all-in-one tool you've been waiting for. With a quad-core processor, angled rear-facing barcode scanner, warm-swappable battery, and multi-carrier 4G LTE with voice capabilities<sup>13</sup>, it's ready to go when and where work takes you today. The Toughpad F1 comes with the latest Windows 10 IoT with enterprise-grade security, manageability and native device interoperability that enables the Internet of Things. And it's built to take a six-foot drop or a downpour, so it even works with a wet screen or with gloves on. It is the right choice for unrelenting conditions.

# TOUGHPAD FZ-F1

<b>SOFTWARE</b>	<ul style="list-style-type: none"> <li>Windows 10 IoT Mobile Enterprise<sup>2</sup></li> </ul>								
<b>DURABILITY</b>	<ul style="list-style-type: none"> <li>MIL-STD-810G (shock, vibration, rain, dust, sand, altitude, freeze/thaw, high/low temperature, temperature shock, humidity)</li> <li>IP66 and IP68 sealed all-weather design</li> <li>6' drop-resistant and tumble tested (1000 tumbles, 3.3ft. 5 rpm)</li> <li>Port covers</li> <li>Raised bezel for LCD impact protection</li> </ul>								
<b>CPU</b>	<ul style="list-style-type: none"> <li>Qualcomm® MSM8974AB 2.3GHz Quad Core</li> </ul>								
<b>STORAGE &amp; MEMORY</b>	<ul style="list-style-type: none"> <li>Memory 2GB<sup>1</sup></li> <li>Storage eMMC: 16 GB<sup>1</sup> <ul style="list-style-type: none"> <li>Additional storage available with optional Storage Card: SD (up to 2 GB), SDHC (up to 32 GB), SDXC (up to 64 GB)<sup>2</sup></li> </ul> </li> </ul>								
<b>DISPLAY</b>	<ul style="list-style-type: none"> <li>4.7" high definition 1280 x 720 daylight-viewable display</li> <li>10-point capacitive multi touch with glove touch mode           <ul style="list-style-type: none"> <li>Optional Passive pen</li> <li>Rain sensing touch mode<sup>4</sup></li> <li>~2-500 nit</li> <li>VA display with direct bonding</li> <li>Anti-reflective and anti-glare screen treatments</li> <li>Automatic screen rotation</li> </ul> </li> </ul>								
<b>AUDIO</b>	<ul style="list-style-type: none"> <li>Integrated microphone x 3</li> <li>Loud volume twin speakers up to 100 db</li> <li>Noise suppression and echo cancellation engine</li> </ul>								
<b>KEYBOARD &amp; INPUT</b>	<ul style="list-style-type: none"> <li>10-point gloved multi touch + active stylus capability</li> <li>2-4 tablet buttons (user-definable)</li> <li>On-screen QWERTY keyboard</li> </ul>								
<b>SENSORS</b>	<ul style="list-style-type: none"> <li>Ambient light sensor, digital compass, gyro and acceleration sensors</li> </ul>								
<b>CAMERAS</b>	<ul style="list-style-type: none"> <li>Full HD 5MP webcam</li> <li>Full HD 8MP rear camera with LED light</li> </ul>								
<b>EXPANSION</b>	<ul style="list-style-type: none"> <li>microSDXC (up to 64 GB)<sup>2</sup></li> </ul>								
<b>INTERFACE</b>	<table border="0"> <tr> <td>■ Docking connector</td> <td>9-pin</td> </tr> <tr> <td>■ Mini-USB 2.0 (x 1)<sup>3</sup></td> <td>4-pin</td> </tr> <tr> <td>■ Headphone &amp; microphone</td> <td>Mini-jack stereo</td> </tr> <tr> <td>■ xPak interface</td> <td>9-pin</td> </tr> </table>	■ Docking connector	9-pin	■ Mini-USB 2.0 (x 1) <sup>3</sup>	4-pin	■ Headphone & microphone	Mini-jack stereo	■ xPak interface	9-pin
■ Docking connector	9-pin								
■ Mini-USB 2.0 (x 1) <sup>3</sup>	4-pin								
■ Headphone & microphone	Mini-jack stereo								
■ xPak interface	9-pin								
<b>WIRELESS</b>	<ul style="list-style-type: none"> <li>Qualcomm® WCN3680B IEEE802.11 a/b/g/n/ac<sup>13</sup></li> <li>Qualcomm® MSM874AB - 4G LTE, HSPA+, UMTS, EDGE, GPRS, GSM, CDMA 1x, EVDO Rev.A<sup>13</sup></li> <li>Micro SIM card slot x 2</li> <li>Bluetooth® v4.1 LE (class 1)</li> <li>GPS 2m CEP50 (±2 to 4m) GLONASS</li> <li>Near Field Communication (NFC)           <ul style="list-style-type: none"> <li>Type A, Type B, Felica</li> </ul> </li> </ul>								
<b>POWER SUPPLY<sup>5,6,7,8,9</sup></b>	<ul style="list-style-type: none"> <li>Standard battery: Li-ion 3.8V, 3,200 mAh</li> <li>Optional long life battery: Li-ion 3.8V, 6,400mAh</li> <li>Standard battery operation:           <ul style="list-style-type: none"> <li>Standby up to 700 hours; Talk up to 24 hours; Barcode up to 12 hours</li> </ul> </li> <li>Long life battery operation:           <ul style="list-style-type: none"> <li>Standby up to 1400 hours; Talk up to 48 hours; Barcode up to 24 hours</li> </ul> </li> <li>Continuous use data:           <ul style="list-style-type: none"> <li>~8 to 16 hours</li> </ul> </li> <li>Warm Swap:           <ul style="list-style-type: none"> <li>~ Approx. 1 min.</li> </ul> </li> <li>Standard battery charging time:           <ul style="list-style-type: none"> <li>~ Power on approx. 2 hours</li> </ul> </li> <li>Micro-USB Charging capability sold separately</li> </ul>								
<b>POWER MANAGEMENT</b>	<ul style="list-style-type: none"> <li>Consumption approx. 18W</li> <li>Warm swap battery - Keeps applications active up to 1 minute</li> </ul>								
<b>SECURITY FEATURES</b>	<ul style="list-style-type: none"> <li>FIPS140-2 level-1 compliant</li> <li>ARM® TrustZone® (Built-in)</li> </ul>								
<b>WARRANTY</b>	<ul style="list-style-type: none"> <li>3-year limited warranty, parts and labor</li> </ul>								
<b>DIMENSIONS &amp; WEIGHT<sup>10,11</sup></b>	<ul style="list-style-type: none"> <li>6.12"(L) x 2.92"(W) x 0.64"(H)</li> <li>Approx. 0.62 lb.</li> </ul>								

## KEY FEATURES

- 1D/2D barcode reader
- Optional magnetic stripe reader

## ACCESSORIES

■ AC Adapter (3-prong) [Not included]	CFAA6373AM
■ Charging Cup for FZ-N1, FZ-F1, (No Power Supply nor AC cord)	FZVCBN11U
■ Standard Battery 3,200mAh for FZ-N1, FZ-F1	FZVZSUN110U
■ Extended Battery 6,400mAh for FZ-N1, FZ-F1	FZVZSUN120U
■ Single Bay Cradle for FZ-N1, FZ-F1, built-in single battery charger with 60W Power Supply and AC cord	FZVEBN111BUN
■ 4-Bay Cradle for FZ-N1, FZ-F1 with 110W Power Supply and AC cord	FZVEBN121M
■ Passive optional Stylus	CFVNP021U
■ Protective Film (10 Sheets) for FZ-N1, FZ-F1	FZVFPN11U
■ Holster with belt for FZ-N1, FZ-F1	FZVSTN12U
■ Hand strap (Lrg) for FZ-N1, FZ-F1	FZVSTN11U

Please consult your reseller or Panasonic representative before purchasing.

Specifications given herein may be changed at any time without prior notice.

<sup>1</sup> 1 MB = 1,048,576 bytes, 1 GB = 1,073,741,824 bytes

<sup>2</sup> Operation has been tested and confirmed using the following Panasonic brand memory cards: SD (up to 2 GB), SDHC (up to 32 GB), SDXC (up to 64 GB). Compatibility with other SD devices is not guaranteed.

<sup>3</sup> Does not guarantee operation of all USB-compatible peripherals.

<sup>4</sup> 1 finger point is available for water proof touch mode

<sup>5</sup> The AC adaptor is designed for use with power sources that supply up to 240 V AC. The included AC cord is designed for use with power sources that supply up to 300V AC.

<sup>6</sup> Actual performance varies depending on usage conditions, connected peripherals, etc. Typically, operating time is reduced in colder environments.

<sup>7</sup> Talk time may vary according to cellular network condition. Measured with VOIP application.

<sup>8</sup> When the battery is fully charged (or not being charged) and the unit is off.

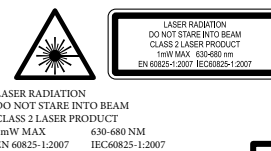
<sup>9</sup> Rated power consumption.

<sup>10</sup> Actual size may vary by unit configuration.

<sup>11</sup> Average weight. Actual weight may vary by unit configuration.

<sup>12</sup> Product functionality cannot be guaranteed if the operating system is modified or replaced by the user or a third party.

<sup>13</sup> Multi-carrier 4G LTE with cellular voice capability is not currently available for this model but is coming soon. Please contact a Panasonic representative for more information.



**1.866.413.3099**  
**business.panasonic.ca**

Panasonic is constantly enhancing product specifications and accessories. Specifications subject to change without notice. Trademarks are property of their respective owners. ©2017 Panasonic Corporation of North America. All rights reserved. Android is a trademark of Google Inc. Toughpad FZ-F1 Spec Sheet\_02/17

**TOUGHPAD**