TOUGHpad FZ-M1

- MIL-STD-810G, 5’ Drop and All-weather IP65, Dust and Water-resistant Design
- User-replaceable Battery, Bridge Battery and Optional Long Life Battery
- Optional NFC, Ethernet, Serial, Smart-Card, Magstripe and Barcode Reader
- Wi-Fi, Bluetooth® and Optional Dedicated GPS± or 4G LTE Multi Carrier Mobile Broadband
- Industry leading driver packages for ease of deployment and support
- Additional Options; Flir Thermal Camera model, Real Sense Camera model, RTK/GPS model
- Panasonic recommends Windows

The World’s Most Configurable 7” Windows® Tablet, With Intel® 7th Generation Core i5 Processor.

The Panasonic TOUGHpad® FZ-M1 is the fully rugged Windows® tablet, built to enable mission-critical mobile worker productivity without compromise. Powered by Windows® 10 Pro, the TOUGHpad FZ-M1 features a long life, user-replaceable battery and a daylight-readable, high-sensitivity multi-touch display for use with heavy gloves. With the broadest range of configuration options available in its class, the highly customizable TOUGHpad FZ-M1 is the ideal tool for today’s mobile workforce. In addition to the highly configurable options, added models of Thermal Camera, Real Sense Camera, RTK/GPS, as well as several more. Allows the M1 to be the most comprehensive 7” tablet in the market.
**SOFTWARE**
- Windows® 10 Pro 64-bit
- Panasonic Utilities (including Dashboard), Recovery Partition

**CERTIFICATIONS AND DURABILITY**
- MIL-STD-810G certified
-  5’ drop, shock, vibration, rain, dust, sand, altitude, freeze/thaw, high/low temperature, temperature shock, humidity, explosive atmosphere
- IP65 certified sealed all-weather fanless design
- Optional ANSI/ISA 2.12.01-2013 Class I Division 2 on selected models

**CPU**
- Intel® Core™ i5-7Y57 Processor
- 1.2 GHz up to 3.3 GHz with Intel® Turbo Boost Technology
- 4MB cache

**STORAGE & MEMORY**
- 8GB SDRAM (LPDDR3)
- 256GB SSD with heaters

**DISPLAY**
- 7” WXGA 1280 x 800
- 10-point capacitive gloved multi touch
- 2 – 700 nit
- Anti-reflective (AR) clear
- Intel® HD Graphics 655, Premium [Built-in-Chip Set]
- Dual monitor support
- Concealed mode (configurable)

**AUDIO**
- Built-in Directional Array Microphones
- Intel® High Definition Audio subsystem support
- Integrated speaker
- On-screen and button volume and mute controls

**CAMERAS**
- Front: 2MP(USB) webcam with Dual Microphone
- Rear: 8MP MIPI, with Camera Flash LED
- Optional Dual Band Wireless-AC 8265 Wi-Fi
- Intel Real Sense Camera (D410)
- Thermal Camera (Flir Lepton 3.5)
- Intel Core i7-7Y75 Processor
- HD Graphics 615, Premium

**KEYBOARD & INPUT**
- Stylus pen with integrated stylus holder
- Touch Screen Mode Options: Pen Only, Pen and Touch, Touch Only, Touch Only-Glove, Touch Only-Water
- 6 tablet buttons (2 user-definable)
- On-screen QWERTY keyboard

**INTERFACE & EXPANSION**
- Docking Connector 24-pin
- Headphones/Mic 3.5mm Jack, Stereo
- USB 3.0 (x 1) Type A
- Optional USB 2.0 (x 1) Type A
- MicroSDXC UHS-I
- Optional 10/100 Ethernet RJ-45
- Intel® Dual Band Wireless-AC 8265 Wi-Fi
- Bluetooth® v4.2 (Class 1)

**WIRELESS**
- Optional 4G LTE multi-carrier mobile broadband with satellite GPS
- Optional GPS (u-blox NEO-M8N)
- Optional dual high-gain antenna pass-through

**SECURITY FEATURES**
- Password Security: Supervisor, User, Hard Disk Lock
- Kensington cable lock slot
- Trusted platform module (TPM) security chip x 2.04
- Persistence technology by Absolute embedded in BIOS
- Optional insertable SmartCard reader (half size or full size)
- Optional contactless RFID and SmartCard/NFC reader
- ISO 14443 A/B compliant

**POWER**
- Li-ion battery pack:
  - Standard battery: 7.2V, typical 3220mAh, min. 3050mAh
  - Long life battery: 7.2V, typical 7100mAh, min. 6800mAh
  - Battery operation:
    - Standard battery: 8 hours
    - Optional long life battery: 16 hours
    - Standard bridge battery: 1 minute swap time
  - Battery charging time:
    - Standard battery: 2.5 hours off, 3.5 hours on
    - Optional long life battery: 4.5 hours off, 6.5 hours on
  - Bridge battery: 1 minute hot swap time
  - AC Adapter: AC 100V-240V 50/60Hz

**DIMENSIONS & WEIGHT**
- 7.98”(L) x 5.20”(W) x 0.71”(H)
- 1.27 lbs.

**WARRANTY**
- 3-year limited warranty, parts and labor

**INTEGRATED OPTIONS**
- Choice of 2G barcode reader, Ethernet, Serial, 2nd USB2.0, Choice of insertable SmartCard, contactless SmartCard/NFC, magstripe, Serial&Ethernet, full size SD card&Ethernet, RTK GPS, Dedicated GPS, full size SmartCard or rugged fisher port

**ADDITIONAL MODEL OPTIONS**
- Thermal Camera (Flir Lepton 3.5)
- Intel Real Sense Camera (D410)
- RTK/GPS Model
- Black Cabinet Option

Please consult your reseller or Panasonic representative before purchasing to learn more about the TOUGHBOOK 20 and the wide variety of accessories and services offered.

Caution: Do not expose bare skin to this product when handling this unit in extreme hot or cold environments.

1 Thermal camera is mutually exclusive with insertable SmartCard, contactless SmartCard/NFC, magstripe, 2D barcode, serial dongle, ethernet, 2nd USB port, Serial&Ethernet, full size SD card&Ethernet, RTK GPS, Dedicated GPS, full size SmartCard or rugged fisher port.

2 1GB 1,000,000,000 bytes. Total usable memory will be less depending upon actual system configuration.

3 Battery performance features such as charge time and life span can vary according to the conditions under which the computer and battery are used. Battery operation and recharge times will vary based on many factors, including screen brightness, applications, features, power management, battery conditioning and other customer preferences. Battery testing results from MobileMark 2014.

4 Requires software and activation to enable theft protection.

5 Length measurements do not include protrusions or configurable options.

6 Accessories and Integrated Options may vary depending on your configuration. Visit Panasonic website for more accessories and details.

7 4G LTE and dedicated GPS (u-blox) are mutually exclusive.

8 The following options are mutually exclusive: insertable SmartCard, contactless SmartCard/NFC, magstripe, Serial&Ethernet, full size SD card&Ethernet, RTK GPS, Dedicated GPS, full size SmartCard, rugged fisher port.

9 The following options are mutually exclusive: 2D barcode reader, Ethernet, Serial, 2nd USB2.0.