

Nomad 1050

Datasheet



Rugged Handheld Computer

Features

- IP68 rated rugged for any environment
- 15 hour battery life
- Numeric, backlit keypad
- Integrated 2-4 meter GPS
- 3.75G dual-band GSM/CDMA modem
- 5 MP camera with flash and geotagging
- Integrated Bluetooth® and Wi-Fi
- Full-color VGA display
- 1.0 GHz processor
- Microsoft® Windows® Embedded Handheld (WEHH) 6.5

Spectra Precision Nomad 1050

A Complete Package

The Spectra Precision Nomad® 1050 rugged handheld computer's many built-in capabilities make it an optimized and easy to use field data collector. It provides all the features you need, including: a 5200mAh lithium-ion battery with more than 15 hours of continuous use, 8 GB storage, and a high-resolution, sunlight-readable VGA color display to show images, maps and data in crisp detail. And all of that on an IP68 rated, fully rugged device. It's built to work hard all day long, just like you do.

For communications, Nomad 1050 offers a full range of integrated wireless capabilities including Bluetooth®, WiFi 802.11 b/g and an optional 3.75G dual-band GSM/CDMA modem for internet connectivity wherever you happen to be. Integrated expansion via SD card slots also provide an easy method of data sharing. The basics are also there including RS232 serial connections and USB.

The Nomad 1050 boasts an advanced Global Navigation Satellite System (GNSS) antenna design which reads the full constellation of satellite signals plus SBAS – it's a perfect complement to the Survey Pro GeoLock feature for robotic target location. The 5 megapixel camera captures high resolution images to document your work. Photographs can be geotagged for use in various applications.

The backlit numeric keypad makes data entry easier, especially when wearing gloves and a range of accessories including tripod and pole brackets make the Nomad 1050 a full-featured product that will work for you. The 1.0 GHz processor has the power you need for advanced application work, with the Nomad's optimized graphics processing, advanced caching, and proprietary high-speed journaling system.

Nomad – it is technology made to work for you.



Technical Specifications

- Microsoft® Windows® Embedded Handheld (WEHH) 6.5 Professional, available in English, Spanish, French, German, Italian, Japanese, Korean, Portuguese (Brazilian), Russian, or Chinese (Simplified)
- Processor: 1 GHz, Texas Instruments™ DM3730
- 512 MB DDR SDRAM
- 8 GB non-volatile Flash storage
- Full VGA sunlight-readable color TFT display
- Resistive Touchscreen
- Rugged submersible design (prolonged immersion in water at 1 meter depth)
- IP68 and MIL-STD-810G
- Integrated speaker and microphone
- Bluetooth® 2.0 + EDR
- SDIO/SDHC or a micro SD/SDHC slot
- Notification LEDs
- USB client and optional host
- Headset jack (2.5 mm mono audio and microphone)
- 15-hour battery life (in active use with default settings)
- Keypad with backlight
- 12-month limited warranty

Spectra Precision Field Software

- Survey Pro
- Layout Pro

Configuration Options

- Integrated Dual-Mode 3.75G GSM / CDMA capability
- Integrated GPS (SiRFstar IV, WAAS / SBAS capable)
- Integrated Wi-Fi b/g
- USB Host slot
- Integrated digital camera (color, 5 megapixel resolution, with flash)

Standard Software

- Microsoft Office Mobile
 - Word Mobile
 - Excel Mobile
 - PowerPoint Mobile
 - Outlook Mobile
 - Pocket OneNote
- Online help
- Internet Explorer Mobile
- Notes/Tasks
- Calculator
- Windows Media Player
- Microsoft Pictures and Videos
- Contacts/Calendar
- Microsoft ActiveSync®

Standard Accessories

- Rechargeable Li-ion battery module
- Orientation Guide
- Rugged stylus with spring-loaded tip
- Hand strap
- Stylus lanyard
- Screen protectors
- Carry case
- AC charger and international adapters
- USB data cable
- Serial boot
- Standard Cap

Physical Characteristics

Size

- 17.6 cm x 10 cm x 5.0 cm (6.92 in x 3.92 in x 1.96 in)

Weight

- 596 g (21 ounces) including rechargeable battery

Housing

- Polycarbonate

Color

- Dark Gray w/ Black

Environmental Characteristics

Meets or exceeds:

Water

- Survives IP-X8, immersion at 2m (6.6 ft) for 1 hour IEC-60529, Survives IP-X6, water jet 12.5mm dia @ 2.5-3m (8-10ft)

Dust

- Protected against dust, IEC-60529 IP-6X, dust chamber under-pressure

Drops

- Survives multiple drops of 1.2m(4ft), MIL-STD-810G, Method 516.6, Procedure IV, Transit Drop

Operating Temperature

- 30 °C to 60 °C (-22 °F to 140 °F), MIL-STD-810G, Method 502.5, Procedure I, II, III (Low Temp Operating -30 °C); Method 501.5, Procedure I & II (High Temp Operating 60 °C)

Storage Temperature

- 40 °C to 70 °C (-40 °F to 158 °F), MIL-STD-810G, Method 502.5, Procedure I, II, III (Low Temp Storage -40 °C); Method 501.5, Procedure I & II (High Temp Storage 70 °C)

Temperature Shock

- Cycles between -30 °C and 60 °C (-22 °F and 144 °F), MIL-STD-810G, Method 503.5, Procedure I-C

Humidity

- 90% relative humidity with temperatures between -30 °C and 60 °C (-22 °F and 144 °F), MIL-STD-810G, Method 507.5, Procedure II

Altitude

- 4,572 m (15,000 ft) at 23 °C (73 °F) to 12,192 m (40,000 ft) at -30 °C (-22 °F), MIL-STD-810G, Method 500.5, Procedure I, II & III

Vibration

- General minimum integrity and loose cargo tests, MIL-STD-810G, Method 514.6, Procedure I & II, Category 5

Solar Exposure

- Survives prolonged UVB exposure, MIL-STD-810G, Method 505.5, Procedure II

Chemical Exposure

- Resistant to mild alkaline and acid cleaning solutions, fuel hydrocarbons, alcohols and common vehicle and factory machine lubricants

Electrical

Processor

- 1.0 GHz, Texas Instruments DM3730

Memory

- 512 MB DDR SDRAM; ~10 MB reserved

Storage

- 8 GB onboard non-volatile NAND Flash; ~50 MB reserved

Expansion

- 1x Micro SD/SDHC slot (XC model)
- 1x USB Host and SDIO slot (B and L models)

Display

- 3.5", 480 x 640 pixel (full VGA) 16-bit color TFT with LED backlight

Batteries

- 5200 mAh Li-ion rechargeable module¹

I/O

- USB host and client, power, headset jack

GPS Accuracy

- 2-4 m (6-13 feet) SBAS corrected²

Radios

- Bluetooth 2.0 + EDR; WLAN: Wi-Fi (802.11b/g); WWAN: Dual Mode 3.75G GSM/CDMA

Certifications

- FCC, CE, R&TTE, IC (Canada), A-tick, C-tick, GCF compliant, RoHS compliant, Section 508 compliant, PTCRB, SAR, AT&T network certified, Verizon, Wi-Fi Alliance certified, MIL-STD-810G, IP68

Specification subject to change without notice.

- To ensure best performance when temperatures are below -4 °F (-20 °C), be sure battery is inserted in the device only when in use. When device is not in use at these temperatures, keep batteries in a pocket or stored in a warmer area.
- 2-4 m (50%-95%) accuracy determined using Horizontal Root Mean Squared method - Open Sky.

Nomad 1050 Model Configurations									
	RAM/Flash	SDIO	USB Host	Micro SDHC	Bluetooth	WiFi	GPS	WWAN	Camera
1050 B		⊙	⊙		⊙				
1050 L	512 MB / 8GB	⊙	⊙		⊙	⊙	⊙		
1050 XC				⊙	⊙	⊙	⊙	⊙	⊙





Vectors Colorado - (303) 283-0343
10670 East Bethany Drive, Building 4
Aurora, CO 80014

Vectors New Mexico - (505) 821-0343
5640 Venice Avenue, Unit J
Albuquerque, NM 87113

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