hornet⁺

Compact Bluetooth® high performance UHF RFID & Barcode reader

Made for
iPod iPhone iPad

Features:

High Performance Bluetooth® Multi-modal Data Capture

UHF RFID and 2D barcode data capture in one integrated Bluetooth® device.

Hardware Platform Independence

Operates with wide variety of Bluetooth® wireless technology enabled host devices including touchscreen MP3 players, phones, tablets, Enterprise Handhelds and PC's.

OS Independence

Operates with the broadest range of mobile computer operating systems.

Batch Data Collection

Removable high capacity Micro SD data card and real time clock for extended batch data collection with time stamp independent of the host connection.

High Performance barcode scanning

Integrated Motorola SE4500 imaging engine provides class leading barcode scan performance via its unique patent pending fast pulse illumination which delivers outstanding motion tolerance and class leading 1D and 2D data capture.

Data Collection Performance Like No Other

Nordic+ brings you Hornet+ a compact Bluetooth® UHF RFID & barcode wearable reader which provides new levels of RFID performance. With
Its compact form factor, Hornet+ performs like no other reader giving the user an extremely compact and lightweight multifunction data collection device. Designed to read and write to EPC Class 1 Gen 2 (ISO18000-6C) tags, the 1153 includes high performance 2D data scanning to bring unparalleled data collection capabilities to any host it is connected to. The Motorola SE4500 engine incorporates fast pulse illumination and fast sensor shutter speeds, delivering outstanding motion tolerance and class leading 1D and 2D data capture.

As Easy As ABC…

The new Hornet+ Bluetooth® UHF RFID & Barcode reader incorporates Nordic+'s unique ASCII 2 protocol for faster and easier application development. This sophisticated parameterised protocol provides the developer with a powerful set of commands that carry out multiple actions locally within the reader. This approach enables multiple tag operations to be executed using simple pre-configured ASCII commands which not only speeds integration of the reader into applications but also abstracts the developer from some of the complexities of the underlying Native API and ultimately results in unparalleled
levels of performance.

A Configuration To Suit Your Application

The choice of host device is yours - from low cost touchscreen MP3 players through to fully featured Enterprise Handheld Terminals. The choice of ergonomic style includes either a 'back of hand' mount or an arm mount option for scan intensive RFID and 2D bar code data collection applications. EPC data can be stored on an optional MicroSD memory card (at least 25 million Transponder EPCs on a typical 2GB card) with date and time stamping. This allows logging of all transponder EPC readings and provides the ability to collect data even if USB or Bluetooth® communication channels are not available.

Platform Independent UHF RFID Reader

Use existing Bluetooth® wireless technology enabled1 host devices including Enterprise Handhelds, Consumer Phones, Touchscreen MP3 players, Tablets and PC's – Hornet+ will bring high performance RFID and 2D scanning to all these devices running a wide range of Operating Systems. Hornet+ Bluetooth® UHF RFID reader can also be tethered to a PC using a USB cable.
Extensive software support is available for a wide range of platforms including code samples, demonstration applications and source code.

PHYSICAL and ENVIRONMENTAL CHARACTERSTICS:

Dimensions (LxWxH): 10.2 x 5.5 cm x 5.6 cm

Weight: 130 g / 4.6 oz

User Input: Two trigger buttons

User feedback: Speaker, vibration motor three LEDs

Power: Removable, rechargeable 3.7 volt Lithium Polymer 1130 mAh battery pack, 4.2 watt hrs

Enclosure Materials: Black Lexan EXL9330 PC
Yellow Lexan EXL9330 PC

PERFORMANCE CHARACTERISTICS:

RFID Engine: AMS AS3993 based

Communication Protocols: ASCII2.0 parameterised command set

Memory: Supports up to 32 GB Micro SD/SDHC card

Compatible Host devices (Bluetooth®): Host device must have Bluetooth® wireless technology functionality supporting the Serial Port Profile

Compatible Host devices (USB): Any USB host with FTDI VCP driver support (Windows, Linux, Mac, Android)

ENVIRONMENTAL:

Operating Temp: -4°F to 140°F / -20°C to 60°C
Charging Temp: 41°F to 104°F / 5°C to 40°C
Storage Temp: -40°F to 158°F / -40°C to 70°C

Humidity: 5% to 95% non-condensing

Drop Spec: Multiple drops to concrete: 4 ft./1.2 m ambient, 3ft / 0.9m across the operating temperature range

Tumble: 500 0.5 metre tumbles at room temperature (1,000 cycles)

Environmental Sealing: IP54

Electrostatic Discharge (ESD): ± 15kVdc air discharge; ± 8kVdc contact discharge

MIL-STD 810F: Meets and exceeds applicable MIL-STD 810F for drop, tumble and sealing

RFID PERFORMANCE:

Standards supported: EPC Class 1 Gen 2
Nominal read range2: up to 6.5 ft./up to 2 m.
Nominal write range2: up to 3.3 ft./up to 1 m.

Field: 150-degree forward facing (approx.) measured from front of device

Antenna: Internal Circularly Polarized
Frequency Range: EU: 865-868MHz; US: 902-928MHz

BARCODE SCANNING:

Imager: Motorola SE4500 2D imager

Sensor Resolution: 752 x 480 pixels

Field of View: Horizontal: 40°, Vertical: 25°

Focal Distance: SR: 8 in. DL: 5.3 in. HD: 2.9 in.

Aiming LED (VLD): 655 ±10 nm Laser

Illumination Element:
625 ±5 nm LEDs (2x)
Min. Print Contrast: Minimum 25%

Symbologies Supported:
1D: All major codes
2D: PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode Postal Codes: US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal Dutch Postal (KIX)

RANGES3:
DL Focus: 5 mil Code 39 100% UPC 5 mil PDF417
Near: 1.4 in./36 mm 1.6 in./41 mm 2.8 in./71 mm
Far: 7.3 in./185 mm 12 in./305 mm 4.5 in./114 mm

BLUETOOTH® WIRELESS TECHNOLOGY:

Bluetooth®: Bluetooth® Version 2.1 SPP profile HID Profile (pending) Apple iAP
Bluetooth® Class: Class 2
Bluetooth® Range4: 10m
Bluetooth® pairing: PIN, Simple Secure Pairing, NFC OOB Pairing (TBA)

PERIPHERALS and ASSESERIES:

External interface: MicroUSB connector for battery charging, and USB connectivity.
USB operating modes: Tethered for real time data capture in conjunction with SmartWedge software.
Download of stored scan data.
Optional desktop charger: Hornet+ 4-Slot Desktop Battery

REGULATORY:

General: Approved for use in Europe, USA & Canada
Electrical Safety: Certified to UL60950-1, CSA C22.2 No.
60950-1, IEC 60950-1, EN 60950-1
EMI/RFI: USA: FCC Part 15
Canada: ICES 003 Class B
EU: EN 301 489-3, EN 301 489-1, EN 301 489-17, EN 302-208, EN55022 Class B, EN55024
Laser Safety: IEC Class2/FDA Class II in accordance with
IEC60825-1/EN60825-1, 21CFR1040.10

NORDIC+

Part Numbers

RFID Reader Options:

Hornet+-EU-BT-UHF-A1 (ETSI)	Hornet+ Bluetooth® Wearable UHF RFID
Hornet+-US-BT-UHF-A1 (FCC)	reader – no barcode engine
Hornet+-EU-BT-UHF-IMG (ETSI)	Hornet+ Bluetooth® Wearable UHF RFID
Hornet+-US-BT-UHF-IMG (FCC)	reader with 2D Barcode Imager

Warranty

Warranty:

The Hornet+ reader is warranted against defects in workmanship and materials for a period of one year (12 months) from date of
shipment, provided the product remains unmodified and is operated
under normal and proper conditions.

Terms:

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Technology Solutions UK Ltd is under license. Other trademarks and trade names are those of their respective owners.1 Compatible Bluetooth® stack required in the Host device 2 Tag Read/Write performance is dependent on tag type, items tagged, number of tags in the field and other radio and environmental factors 3 Artificial lighting can affect scanning performance4 Open

About Nordic Plus

Nordic Plus designs and manufactures both standard and custom embedded, snap on and standalone peripherals for handheld computer terminals.

Embedded technologies include:

- RFID – Low Frequency, High Frequency & UHF
- Bluetooth® wireless technology
- Contact Smartcard
- Fingerprint biometrics
- 1D and 2D barcode scanning
- Magnetic Card Readers
- OCR-B and ePassport

Utilizing class leading Industrial design, Nordic+ develops products from concept through to high volume manufacture for Blue Chip companies around the world. Using the above technologies Nordic+ develops innovative products in a timely and cost effective manner for a broad range of handheld devices.

Contact Nordic Plus

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Connect with us on Facebook: facebook.com/nordicplusRFID

RFID HUT: Would you like to check-out the Hornet+ for yourself? Get in contact with us today and book a visit to our RFID customer experience centre, a truly unique experience where our RFID & Technology experts will be your tour guide. Whether you have unanswered questions or just would like to see the real benefits each product or service we have to offer here at Nordic Plus, The RFID HUT is a real-life environment demo-centre where our hardware and Software flourishes in the retail and industry world. Just let our world class technical experts guide you through our demo centre with a consultative and value added approach, Book your visit to the RFID HUT today.

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