

## nordicidmerlin

Nordic ID Merlin is a robust, high performance best-in-class handheld RFID reader for professional use with future-proof, backwards-compatible design. Ideal for a variety of production uses and commercial applications. Nordic ID Merlin is first and foremost a working tool. It's designed for ruggedness and reliability, and built to operate all day long on a single charge. Great ergonomic design ensures that it fits comfortably in the hand, while superior functionality makes it a valuable tool— simply because it makes work so much easier.

Nordic ID Merlin -series include: Nordic ID Merlin UHF RFID Cross Dipole, Nordic ID Merlin UHF RFID, Nordic ID Merlin HF RFID Blade, Nordic ID Merlin HF RFID and Nordic ID Merlin. Each device is flexible by design, allowing customers to select from various identification and communication options to meet their organization's specific needs.



### PRODUCT VERSIONS

NORDIC ID MERLIN  
UHF RFID CROSS DIPOLE



NORDIC ID MERLIN  
UHF RFID



NORDIC ID MERLIN  
HF RFID BLADE



NORDIC ID MERLIN  
HF RFID



NORDIC ID MERLIN



LASER  
or  
2D  
IMAGER

3G  
UMTS / HSDPA  
900/2100 MHz

GPS  
Assisted GPS

WLAN  
802.11 b/g  
WPA2

BLUETOOTH  
2.0  
+ EDR Class 2

WINDOWS  
CE 6.0

USB &  
ETHERNET  
via Charger

### RFID IDENTIFICATION

**NORDIC ID MERLIN UHF RFID Cross Dipole**  
Supported standard: ISO 18000-6C (EPC Class 1 Gen 2)  
Frequency ETSI 865.6 - 867.6 MHz or FCC/IC 902 - 928 MHz  
RF Power: ERP +30 dBm (1W)  
Nominal reading distance: 5 m  
Typical reading speed: 150 tags per second  
Software controlled antenna polarization  
Horizontal, vertical or cross-polarized

**NORDIC ID MERLIN UHF RFID**  
Supported standard: ISO 18000-6C (EPC Class 1 Gen 2)  
Frequency ETSI 865.6 - 867.6 MHz or FCC/IC 902 - 928 MHz  
RF Power: ERP +27 dBm (0.5W)  
Nominal reading distance: 2.5 m  
Typical reading speed: 150 tags per second  
Horizontal linear polarized

**NORDIC ID MERLIN HF RFID BLADE**  
Supported standard: ISO15693  
RF Power: 13.56MHz, 1W  
Nominal reading distance: 0-40 cm  
Reading speed: up to 40 tags per second

**NORDIC ID MERLIN HF RFID**  
Supported standard: ISO15693  
RF Power: 13.56MHz, 1W  
Nominal reading distance: 0-30 cm  
Reading speed: up to 40 tags per second

### LASER IDENTIFICATION

**1D laser scanner**  
All major 1D bar codes  
Adaptive Auto-Range Laser (standard-, long- and auto-range)  
Normal, hold to aim and hold down modes  
Enhanced aiming mode (automatic switching between scan line / aiming dot)  
Configurable scan alert sounds

**2D imager**  
All major 1D and 2D codes  
High visibility LED aimer  
2 character pre and post fixes, padding, replacement  
Video preview  
Configurable scan alert sounds

### PRODUCT HIGHLIGHTS

- Multiple identification and communication options
- High performance UHF RFID
- Robust and outdoor usable
- Ergonomic and light weight
- Individual button light control
- Clear and bright screen
- Clear keypad layout
- Customer specific SW configurations
- Latest and most secure operating system
- Long operating hours
- 2 years warranty and 5+ years product support

### ACCESSORIES

- Desktop/Vehicle charging cradle with USB connection including power supply (EU, UK, US)
- DC adapter with cigarette lighter connector
- Desktop charging cradle with USB and Ethernet
- 4 slot desktop charger including power supply
- 4 slot battery charger including power supply (EU, UK, US)
- Holsters and protective covers
- Pistol grip (includes battery)
- Available in custom colours

### PREINSTALLED APPLICATIONS

- MICROSOFT APPLICATIONS:
- Internet Explorer web browser
- Wordpad
- Microsoft® Silverlight™
- IE with Adobe® Flash® Lite

PLATFORM	
CPU	ARM11 532 MHz
Operating system	Microsoft® Windows® Embedded CE 6.0
Memory	256 MB DDR RAM 288 MB Flash (256 MB user accessible) microSD card slot (SDHC compatible)
USER INTERFACE	
Display	3,5" QVGA touch screen, 240 x 320 pixels, 262k colours Adjustable LED backlight, Daylight readable
Keypad	Numeric (alpha) keypad 29 distinguished buttons: 0-9 (alpha), scan, ok, del, tab, esc, shift, alt, 3 mode keys, 6 navigation keys Keyboard backlight with individual control for each key
Signals and indicators	Buzzer for audible signals (RTTTL support) Battery charging indicator LED Programmable LED
COMMUNICATION	
Wireless WAN	3G UMTS / HSDPA (900/2100 MHz) GPRS / EDGE (900/1800 MHz) (optional)
GPS	Assisted GPS (optional)
Wireless LAN	IEEE 802.11 b/g
WLAN security	Standards: WEP, WPA, WPA2 (802.11i) Encryption: WEP, TKIP, AES
Wireless PAN	Bluetooth 2.0 + EDR, Class 2
LAN	Ethernet 10/100 via charger (optional)
PAN	USB via charger
POWER	
Battery	Rechargeable, removable Lithium-Ion battery pack 2600 mAh @ 7.4V 4800 mAh @ 7.4V with pistol grip Up to 30 h in intensive use (standard battery)
Charging	Desktop charging cradle with USB connection Desktop charging cradle with spare battery charging slot Typical charging time: 2,5 h (0 to 90 %) and 5 h (0 to 100 %)
External power supply	AC adapter for desktop charger: input 100-240 VAC, 1A, 50-60 Hz / output 24 VDC, 1.3A, 31.2 W / Power cable for EU, UK or US
Backup battery / batteries	Back-up battery for RAM: maintains memory contents for 8 hours Back-up battery for real-time clock: keeps time for 200 days
SIZE AND WEIGHT	
Dimensions	Nordic ID Merlin UHF RFID Cross Dipole (H) 250 x (W) 105 x (D) 175 mm Nordic ID Merlin UHF RFID (H) 250 x (W) 90 x (D) 47 mm Nordic ID Merlin HF RFID Blade (H) 340 x (W) 105 x (D) 265 mm Nordic ID Merlin HF RFID (H) 250 x (W) 90 x (D) 47 mm Nordic ID Merlin (H) 230 x (W) 90 x (D) 47 mm
Weight	Nordic ID Merlin UHF RFID Cross Dipole ~ 750 g Nordic ID Merlin UHF RFID ~ 550 g Nordic ID Merlin HF RFID Blade ~ 750 g Nordic ID Merlin HF RFID ~ 550 g Nordic ID Merlin ~ 450 g
DROP AND SHOCK	
Drop and impact resistance (drops onto concrete)	1.6 m (all except HF RFID Blade: 1.2 m)
Tumble	Contacts ~500 tumbles (all except HF RFID Blade: n/a) Air discharge 1 m ~250 tumbles (all except HF RFID Blade: n/a)
ESD	Contacts +/- 4kVdc Air discharge +/- 8kVdc
ENVIRONMENT	
Environmental sealing	IP54 - dust and water splash protected (all except HF RFID Blade: n/a)
Temperature	Operating -20° to +55° C Storage -20° to +60° C Charging 0° to +45° C
Relative humidity	10% to 95% non-condensing

#### NORDIC ID APPLICATIONS:

- Display rotate
- Registry backup
- IP config
- Version tool
- NID Menu

#### CONTROL PANEL APPLET:

- NID Autostart: automatic start of application after network connection is established
- NID Backlight: backlight brightness
- NID Indicators: battery level and signal level indicators
- NID Backlight: keyboard & display brightness level
- NID Keypad: keyboard mapping
- NID LinkWatchdog: connection monitoring
- NID Menu: application manager
- NID Powerbutton: power button mapping
- NID Scanner: barcode type settings
- NID SNTP Service: network time synchronisation
- NID Touch screen: disable/enable
- NID Trigger button: Trigger button mapping
- NID WWAN settings

#### OPTIONAL APPLICATIONS

- Nordic ID Thin Client: RF-series emulation
- Naurtech CETerm: terminal emulation client
- Naurtech SAP browser
- Netop remote management

#### SOFTWARE DEVELOPMENT ENVIRONMENT

For all developers:

- USB driver and Microsoft Active sync + remote display
- Nordic ID MHL hardware abstraction layer
- Nordic ID UHF RFID API
- Nordic ID Sample applications and source code
- Nordic ID Customizer

#### FOR .NET (C#, VB ETC)

- Microsoft Visual Studio 2005 and 2008
- .NET Compact Framework 2.0 and 3.5
- Nordic ID SDK
- MHL API wrapper for .NET
- OpenCF .NET

#### FOR C++

- Nordic ID SDK
- NUR API
- MHL API
- Header file

#### FOR HTML

- Nordic ID Sample applications

#### ENVIRONMENT

- Free support during and after 2 year warranty time
- Maintenance service and extended maintenance contract
- Software customization and development support
- Technology, product and integration training
- Technology and project consultation
- Project management services

All information is subject to change without prior notice.



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