

Nordic ID Merlin provides an efficient solution when a robust and multi-functional mobile computer is required. The physical keyboard of the mobile computer eases the use while working with gloves. Suitable application areas are for example manufacturing industries, retail business operations and logistics.



## PRODUCT VARIANTS

NORDIC ID MERLIN  
UHF RFID CROSS DIPOLE



NORDIC ID MERLIN  
UHF RFID CROSS DIPOLE  
ONE-SERIES



NORDIC ID MERLIN  
UHF RFID



NORDIC ID MERLIN  
HF RFID BLADE



NORDIC ID MERLIN  
HF RFID



NORDIC ID MERLIN



UHF RFID



HF RFID



Laser  
Barcode



2D Imager  
Barcode



WLAN



3G



Blue-  
tooth



GPS



Windows  
CE6

### UHF RFID IDENTIFICATION

|   |  |
|---|--|
| Supported standard  | ISO 18000-63 (EPC Class 1 Gen2 V2)   |
| Frequency   | ETSI 865.6–867.6 MHz or FCC/IC 902–928 MHz   |
| Typical reading speed                                     | 200 tags per second (peak up to 400 tags per second)   |
| NORDIC ID MERLIN<br>UHF RFID Cross Dipole<br>- One-series | RF Power: ERP +33 dBm (2W) (Only ETSI 865.6–867.6 MHz)<br>Nominal reading distance: 7 m<br>Software controlled antenna polarization, Horizontal, vertical or cross-polarized |
| NORDIC ID MERLIN<br>UHF RFID Cross Dipole                 | RF Power: ERP +30 dBm (1W)<br>Nominal reading distance: 5 m / 16.4 ft<br>Software controlled antenna polarization, Horizontal, vertical or cross-polarized                   |
| NORDIC ID MERLIN<br>UHF RFID                              | RF Power: ERP +27 dBm (0.5W)<br>Nominal reading distance: 2.5 m / 8.2 ft<br>Horizontal linear polarized  |

### HF RFID IDENTIFICATION

|                                   |   |
|-----------------------------------|---|
| Supported standard                | ISO15693  |
| Frequency                         | 13.56MHz  |
| Typical reading speed             | Up to 40 tags per second  |
| NORDIC ID MERLIN<br>HF RFID BLADE | RF Power: 1W<br>Nominal reading distance: 0–40 cm / 0–15.7 inch |
| NORDIC ID MERLIN<br>HF RFID       | RF Power: 1W<br>Nominal reading distance: 0–30 cm / 0–11.8 inch |

### BARCODE IDENTIFICATION

|                  |   |
|------------------|---|
| 1D laser scanner | All major 1D bar codes<br>Adaptive Auto-Range Laser (standard-, long- and auto-range)<br>Normal, hold to aim and hold down modes<br>Enhanced aiming mode (automatic switching between scan line / aiming dot)<br>Configurable scan alert sounds |
| 2D imager        | All major 1D and 2D codes<br>High visibility LED aimer<br>2 character pre and post fixes, padding, replacement<br>Video preview<br>Configurable scan alert sounds   |

### PRODUCT HIGHLIGHTS

- Powerful mobile computer
- Fast and accurate reading
- Full day use with a single charge
- Sharp colour display

### PREINSTALLED APPLICATIONS

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

### 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

| PLATFORM   |   |
|--|---|
| CPU  | ARM11 532 MHz   |
| Operating system                                 | Microsoft® Windows® Embedded CE 6.0   |
| Memory   | 256 MB DDR RAM<br>288 MB Flash (256 MB user accessible)<br>microSD card slot (SDHC compatible)  |
| USER INTERFACE                                   |   |
| Display  | 3,5" QVGA touch screen, 240 x 320 pixels, 262k colours<br>Adjustable LED backlight, Daylight readable   |
| Keypad   | Numeric (alpha) keypad<br>29 distinguished buttons: 0-9 (alpha), scan, ok, del, tab, esc, shift, alt,<br>3 mode keys, 6 navigation keys<br>Keyboard backlight with individual control for each key  |
| Signals and indicators                           | Buzzer for audible signals (RTTTL support)<br>Battery charging indicator LED<br>Programmable LED  |
| CONNECTIVITY                                     |   |
| Wireless WAN                                     | 3G UMTS / HSDPA (900/2100 MHz)<br>GPRS / EDGE (900/1800 MHz) (optional)   |
| GPS  | Assisted GPS (optional)   |
| Wireless LAN                                     | IEEE 802.11 a/b/g/n   |
| WLAN security                                    | Standards: WEP, WPA, WPA2 (802.11i)<br>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 @ 7.26V<br>5200 mAh @ 7.26V with pistol grip<br>Up to 30 h in intensive use (standard battery)  |
| Charging   | Desktop charging cradle with USB connection<br>Desktop charging cradle with spare battery charging slot<br>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 /<br>output 24 VDC, 1,25A, 30 W / Power cable for EU, UK or US  |
| Backup battery / batteries                       | Back-up battery for RAM: maintains memory contents for 8 hours<br>Back-up battery for real-time clock: keeps time for 200 days  |
| SIZE AND WEIGHT                                  |   |
| Dimensions (H x W x D)                           | Nordic ID Merlin UHF RFID Cross Dipole 250 x 105 x 175 mm / 9.8 x 4.1 x 6.9 inch<br>Nordic ID Merlin UHF RFID 250 x 90 x 47 mm / 9.8 x 3.5 x 1.9 inch<br>Nordic ID Merlin HF RFID Blade 340 x 105 x 265 mm / 13.4 x 4.1 x 10.4 inch<br>Nordic ID Merlin HF RFID 250 x 90 x 47 mm / 9.8 x 3.5 x 1.9 inch<br>Nordic ID Merlin 230 x 90 x 47 mm / 9.1 x 3.5 x 1.9 inch |
| Weight   | Nordic ID Merlin UHF RFID Cross Dipole ~ 750 g / 26.5 oz<br>Nordic ID Merlin UHF RFID ~ 550 g / 19.4 oz<br>Nordic ID Merlin HF RFID Blade ~ 750 g / 26.5 oz<br>Nordic ID Merlin HF RFID ~ 550 g / 19.4 oz<br>Nordic ID Merlin ~ 450 g / 15.9 oz   |
| DROP AND SHOCK                                   |   |
| Drop and impact resistance (drops onto concrete) | 1.6 m / 5.3 ft (all except HF RFID Blade: 1.2 m / 3.11 ft)  |
| Tumble   | 0,5 m / 1.7 ft ~500 tumbles (all except HF RFID Blade: n/a)<br>1 m / 3.3 ft ~250 tumbles (all except HF RFID Blade: n/a)  |
| ESD  | Contacts +/- 4kVdc<br>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 -4 to 130 °F<br>Storage -20° to +60° C -4 to +140 °F<br>Charging 0° to +45° C +32 to +113 °F   |
| Relative humidity                                | 10 % to 95 % non-condensing   |

- Naurtech SAP browser
- Netop remote management

#### SOFTWARE DEVELOPMENT ENVIRONMENT

##### FOR ALL DEVELOPERS:

- Microsoft Visual Studio 2005 and 2008
- 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)

- .NET Compact Framework 2.0 and 3.5
- MHL API wrapper for .NET
- NUR API .NET
- OpenCF .NET - Smart Device Framework

##### FOR C++

- NUR API
- MHL API

##### 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. Availability of product variants may vary regionally.



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