NORDIC ID HH85

THE TOUGHEST MEMBER OF THE ANDROID FAMILY

Created in the forests of Finland. The Nordic ID HH85 builds on an IP65 and 1.6-meter drop tested frame which is useful when tracking your assets in difficult environments. The ergonomic pistol grip design is easy to hold even when wearing gloves.

In these challenging conditions the reader must perform, and this is where one of the lightest, rugged designs in the RFID market can help. The battery gives you up to 18 hours of continuous operation while using one of the largest displays in the industry.

Of course you need brains and brawn. The Nordic ID HH85 is equipped with Android 9 software that complies with your IT rules and fits your needs perfectly.
The software also allows options that are designed to help. The camera can capture important information regarding possible damage to your assets or reception of goods.

This rugged, intelligent, and flexible device is the perfect match for industrial applications.

NORDIC ID HH85 RFID ACD

UHF RFID	WLAN	LTE	2D Imager Barcode	Bluetooth	GNSS	Android 9

PRODUCT HIGHLIGHTS

- Market leading state-of-the-art UHF RFID performance
- Future proof your data collection with this powerful industrial level RAIN RFID performance
- Protect your investment thanks to its superior ruggedness
- Unique combination of large display and ergonomic pistol grip

- Ergonomic design focused on comfortable use
- Operates 18 hours on a single charge
- Android operating system for easy application development
- Fully integrated to Nordic ID solutions

NORDIC ID HH85 RFID ACD

UHF RFID IDENTIFICATION

Supported standard	ISO 18000-63 (EPC Class 1 Gen2v2)
Frequency	ETSI 865.6–867.6 MHz or FCC/IC 902–928 MHz
RF radiated power	Max. ERP 2 W (33dBm) / EIRP 3.3 W (35.2dBm) Adjustable in 1dB steps (30 steps)
Antenna features	• Software controllable antenna polarizations (vertical, horizontal or vertical/horizontal switching) • Reading range up to 15 m / 50 ft
Max receive sensitivity	-80 dBm
Typical reading speed	Up to 1000 tags per second

BARCODE IDENTIFICATION AND IMAGING

2D imager	• All major 1D barcodes and 2D codes • High visibility LED aimer • 2 characters pre and post fixes, padding, replacement • Enhanced aiming mode (automatic switching between scan line / aiming dot) • Configurable scan alert sounds
Camera	5 Mpix rear-facing camera with auto focus and LED flash (torch mode supported)

PLATFORM

RFID	Nordic ID NUR2-1W reader module
CPU	Octa-Core ARM Cortex-A53 1.8 GHz
Operating system	Android 9
Memory	• 2 GB RAM • 16 GB Flash • MicroSD slot with support for SDXC cards
Sensors	Accelerometer, ambient light sensor, Time of Flight sensor (only in barcode variant), proximity sensor, pedometer, gyroscope

USER INTERFACE

Display	• 4.7 HD capacitive touch screen, 1280 x 720 pixels, 16.7 M colors • Adjustable LED backlight, Daylight readable, Gorilla glass 3, usage with gloves supported
Keypad	3 backlit physical keys below the display, 2 customizable trigger buttons on the sides 1 trigger button on the pistol grip
Audio	Microphone, earpiece and IHF speaker
Signals and indicators	RGB LED and vibra for haptic feedback

DROP AND SHOCK

Drop and impact resistance	1.6 m / 5.2 ft	
ESD	Contacts	+/- 4 kVdc
	Air discharge	+/- 8 kVdc

CONNECTIVITY

Wireless WAN (optional)	Europe • 4G LTE (B1/B3/B5/B7/B8/B20/B28A/B38/B40/B41) • 3G WCDMA (B1/B2/B5/B8) • GPRS / EDGE (850/900/1800/1900)
GNSS (optional)	Assisted GPS, BeiDou, GLONASS and Galileo
Wireless LAN	IEEE 802.11 a/b/g/n/ac. Dual band WLAN, supports 2.4 GHz and 5 GHz networks
Wireless PAN	• Bluetooth 4.2 Class 2 • Classic and Low Energy modes supported
PAN	• USB 2.0 via USB Type-C connector • Desktop charger provides USB connectivity via USB Type-C connector
NFC	NFC standards supported: ISO/IEC 14443A, ISO/IEC 14443B, FeliCa, ISO/IEC 15693 (Vicinity)

POWER

Battery	• Rechargeable, removable Lithium-Ion battery: 10050 mAh, 3.6 V • Up to 18 hours in intensive use
Charging	• Charging over desktop charger (0 to 80 %) 4 hours • Charging over USB Type-C connector (0 to 80 %) 4 h (with charger supporting Qualcomm Quick Charge 3.0)
External power supply	• AC adapter for desktop charger: input 100-240 VAC, 1A, 50-60 Hz / output 24 VDC, 1.25A, 30 W / Power cable for EU, UK or US • AC adapter for multiunit desktop charger: input 100-240 VAC, 1A, 50-60 Hz / output 24 VDC, 6.25A / 150W / Power cable for EU, UK or US
Backup battery	For real-time clock: keeps time for 200 days
Battery Hot Swap	Supported

SIZE AND WEIGHT

Dimensions	(H) 214 x (W) 87/72 x (D) 135/29 mm (H) 8.4 x (W) 3.4/2.8 x (D) 5.3/1.1 inch
Weight	642 gr / 22.65 oz

ENVIRONMENT

Temperature	Operating	-20° to +55 °C	-4 to +131 °F
	Storage	-20° to +60 °C	-4 to +140 °F
	Charging	0° to +45 °C	+32 to +113 °F
Relative humidity	10 % to 95 % non-condensing		
Environmental sealing	IP65		

SUPPORT

• Maintenance service and extended maintenance contract
• Software customization and development support
• Technology, product and integration training
• Technology and project consultation
• Project management services

WARRANTY

• 2 year warranty
• Free technical support during and after 2 year warranty

SOFTWARE DEVELOPMENT ENVIRONMENT

• Android Studio, Visual Studio
• Source code available at: https://github.com/NordicID