

## Smartness above everything

The Nordic ID AR85 fixed area reader brings powerful, automated UHF RFID performance with multiple connectivity options.

This fixed area reader contains Nordic ID NUR2-1W module and sophisticated antenna solution that allows to cover up to 120 m<sup>2</sup> of floor space at a reading speed of up to 1000 tags/s. Now even hard-to-read tags will be easier to detect. Thanks to its integrated computer 3rd party applications can be installed and run on reader.

Nordic ID AR85 is ideal for efficiently monitoring a designated area.



UHF RFID	
Supported standard	ISO 18000-63 (EPC Class 1 Gen 2)
Frequency band	ETSI 865.6–867.6 MHz or FCC/IC 902–928 MHz
Regulatory	CE ETSI EN 302 208, CE ETSI EN 301 489, FCC part 15.247 IC RSS-210, Safety IEC 60950-1
Max receive sensitivity	-81 dBm
Typical reading speed	Up to 1000 tags/s
Radiated power	33 dBm (2 W) ERP / 4 W EIRP
Antenna features	Radiation beams: 13 (26 radiation states due to dual polarization) Polarization: Dual-Linear 3dB Beam width: 45 ° Beam steering: ± 40
Floor coverage area per reader	Max. 120 m <sup>2</sup> (2 x installation height)
Conducted radiated power for external antenna ports	30 dBm (1 W)
External antenna port	2 pcs. 50 Ω / SMA Female
PLATFORM	
CPU	1.2GHz 64-bit Quad-Core Cortex-A53 processor
Operating system	Debian based embedded Linux
Memory	1 GB RAM 4 GB flash
USER INTERFACE	
Indicators	4 pcs (programmable) leds
SIM	Mini-SIM
CONNECTIVITY	
USB	USB host, type A USB device, type B, USB HID class supported
GPIO	4 inputs, opto isolated, max. 24V 4 outputs, opto isolated, max. 50mA
Wireless WAN (optional)	3G HSPA (B1, B2, B5, B6, B8 and B19) 2G GPRS / EDGE (850, 900, 1800 and 1900 MHz)
LAN	Ethernet 10/100 Mbit
Wireless LAN (optional)	IEEE 802.11 a/b/g/n, works as an WLAN access point for other Nordic ID readers Dual band WLAN, supports 2.4 GHz and 5 GHz networks
IP Address configuration	IPv4/IPv6 DHCP or Static IP

### PRODUCT HIGHLIGHTS

- Smart fixed area reader for automated UHF RFID data collection
- Enables real-time visibility of tagged items and detecting location and movement
- Integrated Linux based computer for versatile SW development options
- Cutting edge UHF RFID reading sensitivity and reading speed for reliable UHF RFID detection – even of hard-to-read tags
- Improved to minimize interferences of close by readers
- Can be utilized as WLAN access point

### SERVICES AND SUPPORT

- 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



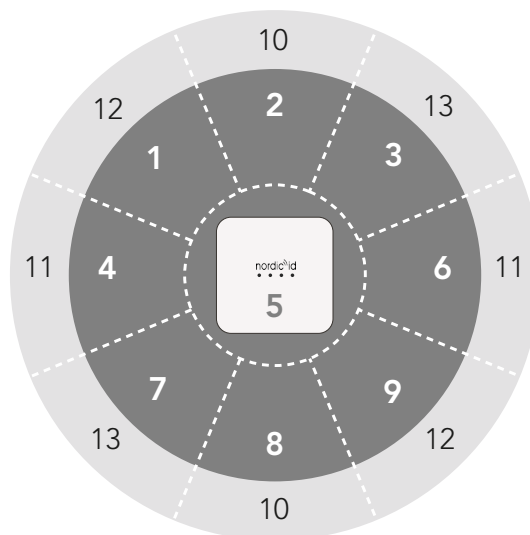
POWER	
External Power Supply	PoE 802.3af or AC/DC adapter: input 100-240 VAC, 1A, 50-60 Hz / output 24 VDC, 1.25A
Operating Power	12W PoE, 20 W DC Note! Wireless LAN and WAN disabled in PoE use
SIZE AND WEIGHT	
Dimensions	(W) 405 x (L) 405 x (H) 68 mm / (W) 15.9 x (L) 15.9 x (H) 2.7 mm
Weight	2.4 kg / 5.3 lb
ENVIRONMENT	
Environmental sealing	IP20, for indoor use only
Inbox content	Nordic ID AR85 and installation kit (power supply not included)
Operating Temperature	-20 °C to 55 °C (-4 to 130 °F)
Storage Temperature	-40 °C to 85 °C (-40 to 185 °F)
Mounting	VESA 75/100 Compatible
SOFTWARE INTERFACE	
Data management	Nordic ID Radea
Device management	Nordic ID Radea
Firmware update	Via Web management UI and the RESTful service
Management interface	Web management UI and SSH for developers
API support	NUR API for RFID and RESTful service to access reader configuration
Other protocols	LLRP
Software development	Ready-to-use Nordic ID NUR API that provides full control over the reader Application can be written with modern programming languages Compatible with existing Nordic ID fixed readers



EU DIRECTIVE 2002/96/EC ON WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

All information is subject to change without prior notice. Availability of product variants may vary regionally.

## BEAM PATTERN



■ tag coordinate available  
□ tag coordinate not available