Out of the box Smartness

Nordic ID Sampo S2 One Series is a powerful fixed UHF RFID reader with and integrated antenna and multiple connectivity options.
This versatile reader and writer offers both EU and US frequencies in one device and is suitable for multiple use cases e.g. in POS and various gate options.
Its integrated computer enables installation and operation of 3rd party applications.
Nordic ID Sampo S2 One Series is equipped with the high-end Nordic ID NUR2-1W module.

UHF RFID	WLAN	Ethernet	USB	3G	PoE/	LED indicators	Linux	Buzzer

UHF RFID

Supported standard Frequency band Regulatory	ISO 18000-63 (EPC Class 1 Gen 2v2) AES authentication in accordance with ISO/IEC 29167-10 supported ETSI 865.6–867.6 MHz and FCC/IC 902–928 MHz CE ETSI EN 302 208, CE ETSI EN 301 489, FCC part 15.247 IC RSS-210, Safety IEC 62368-1:2019 ed. 3
Max receive sensitivity	-81 dBm
Typical reading speed	Up to 1000 tags/s
Radiated power (integrated antenna)	Maximum (aka normal gain mode): 33 dBm (2 W) ERP / 3.3 W EIRP Minimum (aka low gain mode): 4 dBm (2.5 mW) ERP / 4 mW EIRP
Integrated antenna features	Wide band antenna which covers ETSI and FCC/IC frequency bands, 8 dBic circular polarized, Beam width 80°, Nominal reading distance 10 m / 33 ft
Conducted power for external antenna ports	30 dBm (1 W)
External antenna port	3 pcs. 50 Ω / SMA Female
Isolation between external antenna ports	35 dB / typical

PLATFORM

CPU	1.2 GHz 64-bit Quad-Core Cortex-A53 processor
Operating system	Debian based embedded Linux
Memory	1 GB RAM 4 GB flash

USER INTERFACE

SIM	Mini-SIM
Indicators	4 pcs (programmable) LEDs Buzzer for sound indications, Capacitive sensor for triggering reading

CONNECTIVITY

GPIO	4 inputs, opto isolated, max. 24 V 4 outputs, opto isolated, max. 50 mA
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
USB	USB host, type A USB device, type B, USB HID class supported

HIGHLIGHTS

- Powerful UHF RFID long-range reading performance
- Integrated Nordic ID NUR2-1W module for increased performance and reading speeds
- Integrated Linux based computer for versatile SW possibilities/development
- Versatile host and device connectivity options
- Avoid cross readings due to high isolation between antenna ports
- One device for EU or US frequency environments

SERVICES AND SUPPORT

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

WARRANTY

- 2 year warranty
- Extendable up to 5 years

POWER

External Power Supply	PoE 802.3af or AC/DC adapter: input 100-240 VAC, 1 A, 50-60 Hz / output 24 VDC, 1.25 A
Operating Power	12 W PoE, 20 W DC Note! Wireless LAN and WAN disabled in PoE use

SIZE AND WEIGHT

Dimensions	(W) 200 x (L) 260 x (H) 36 mm / (W) 7.9 x (L) 10.2 x (H) 1.4 inch
Weight	810 g / 28.6 oz

ENVIRONMENT

Environmental sealing	IP20, for indoor use only
Inbox content	Nordic ID Sampo S2 One-series and installation kit (power supply not included)
Operating Temperature	-20 to 55 °C (-4 to 130 °F)
Storage Temperature	-40 to 85 °C (-40 to 185 °F)
Mounting	VESA 75/100 Compatible

SOFTWARE INTERFACE

Data management	Nordic ID Radea
Device management	Nordic ID Radea, SOTI®
Firmware update	Via Web management UI and the RESTful service
Management interface	Web management UI and SSH for developers
IP Address configuration	IPv4/IPv6 DHCP or Static IP
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

Nordic ID reserves the right to make changes to the information on this data sheet without prior notification. Availability of product variants may vary regionally. Please contact a Nordic ID representative for clarification on specifications and variants.

EU DIRECTIVE
2002/96/EC ON WASTE
ELECTRICAL AND
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V14