NORDIC ID SAMPO S1

Nordic ID Sampo products include fixed readers and antennas, which come with a flat design. The products are easily integrated into the installation environment.

PRODUCT VARIANTS

NORDIC ID SAMPO S1	NORDIC ID SAMPO S1 ONE-SERIES

UHF RFID Ethernet USB PoE PoUSB Light Sensor Tapping Sensor LED indicators Buzzer

UHF RFID	
Supported standard	ISO 18000-63 (EPC Class 1 Gen2 V2)
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
Typical reading speed	200 tags / sec in DRM mode
Nordic ID Sampo S1 radiated power	Adjustable in 1 dB steps Integrated standard antenna variant: +30dBm (1 W) ERP Integrated low-gain antenna variant: +20dBm (100 mW) ERP Integrated near-field antenna variant: +27dBm (500 mW) ERP External antenna ports: +27dBm (500 mW)
Nordic ID Sampo S1 One-series radiated power	Adjustable in 1 dB steps Integrated standard antenna variant: +33dBm (2 W) ERP Integrated near-field antenna variant: +30dBm (1 W) ERP External antenna ports: +30dBm (1 W)

PRODUCT HIGHLIGHTS

- Long-range and accurate RFID reading
- GPIO connector
- Three external antenna ports
- Power over Ethernet, USB or external power supply

SOFTWARE APPLICATIONS

- RFID Demo Software for testing reader capabilities
- RFID Configurator software for configuring the reader

SOFTWARE DEVELOPMENT

- Ready-to-use Nordic ID NUR API that provides full control over the reader
- Application can be written in C/C++, .NET languages and Java
- USB driver for:
  Windows XP SP3
  Windows Vista Business / Ultimate
  Windows 7 Professional / Ultimate

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Integrated antenna features	Integrated standard antenna variant:
	  8 dBic circular polarized
	  Beam width: 80°
	  Nominal reading distance: 5 m (16 ft) /(One-Series 7 m (23 ft))
	Integrated low-gain antenna variant:
	  -2 dBic circular polarized
	  Beam width: 80°
	  Nominal reading distance: 1.5 m (5 ft)
	Integrated near-field antenna variant:
	  2 dBi near-field optimized antenna
	  Nominal near-field reading distance: 0 – 20 cm (0 – 8 inches) / (One-Series 0 – 40 cm (0 – 16 inches))
	  Nominal far-field reading distance: up to 2 m (6.5 ft) / (One-Series 0-3 m (0 – 10 feet))

External antenna port	3 pcs. 50 Ω / SMA Female (optional)

USER INTERFACE

Signals and indicators	LEDs: Power, RFID on, RFID read and Communication Buzzer for sound indications Light sensor and tapping sensor for triggering reading

CONNECTIVITY

LAN PAN	Ethernet (optional) Bus powered USB 2.0 device (appears as a serial port)
GPIO (optional)	4 inputs, opto isolated, max. 24V 4 outputs, opto isolated, max. 50mA

POWER

External Power Supply	USB, PoE 802.3af (optional) or 240/110V AC/DC adapter
Operating Power	USB only version: 3 W, PoE version: 6 W (RF-Power 500 mW) One-Series: USB only version: 4 W, PoE version: 7 W (RF-Power 1W)

SIZE AND WEIGHT

Dimensions	(W) 200 x (L) 260 x (H) 25 mm ((W) 7.9 x (L) 10.2 x (H) 1.0 inch)
Weight	540 g (19.0 oz)

ENVIRONMENT

Operating Temperature	-20 °C to 55 °C (-4 to 130 °F)
Storage Temperature	-40 °C to 85 °C (-40 to 185 °F)
Environmental sealing	IP20, for indoor use only

All information is subject to change without prior notice.

SUITABLE APPLICATION AREAS

- Point-of-sales
- Document tracking
- Access control
- Tag programming stations
- Smart shelves and smart displays
- Inventory management

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

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