

## 4 Port UHF scalable long range reader



4 Antenna

Nundnet NT 1004R

Nundnet NT 1004R is an elegant, designed to be secure UHF RFID reader that supports four antennae to ensure automatic & remote identification of vehicles or any device in motion with RFID tag by controlling up to four lanes or routes simultaneously regardless of the environmental conditions.

Built to be robust and can be used at low, high & medium risk locations

Nundnet NT 1004R complies with ISO 18000-6B/6C (EPC GEN2) standard. The interface with the external devices can be completed using the RS232, RS485, TCP/IP ports and in special cases USB communication is also available.

The frequency ranges supported are 902 ~ 928MHz, 865 ~ 868MHz, 922 ~ 928MHz and an ideal sensing range for reading of tags or the related device is 15 Meters.

An IP X6 rating insures that the device can resist penetration of water to avoid the risk.

# INTRODUCTION

## KEY FEATURES

### Wireless Frequency

Available in various operating frequencies  
922 ~ 928MHz, 902 ~ 928MHz, 865 ~ 868MHz,



### Weather Proof Housing

IP X6 rated, Protects from powerful water jets, thereby is waterproof.



### Hermetically Protected Housing

This protects the inner parts from any sort of vandalism to a very large extent.



### Interface

Can be integrated with the third party devices using RS232, RS485, TCP/IP, USB, WiFi ports



## PORTS

With Nundnet NT 1004R upto 4 antennas can be connected to cover all security issues and all configurations. Designed to be fully scalable and modular, it allows to manage up to four access lanes for a mixed fleet of vehicles (light, heavy, motor-cycles), whether identification on wide lanes or even distinct access control for four lanes of vehicles.

## INTERFACE & INTEGRATION

Nundnet NT1004R is developed & designed for easy integration into existing digital & electronic management systems in the industry, viz.a.viz access controls, car parking & vehicle access control, retail & property management, ID access control for offices and private buildings, handfree operation. The communication interfaces are RS485 for serial communication, open standard industrial protocol wiegand and other protocols.

## TNC CONNECTOR

The TNC (Threaded Neill–Concelman) connector is a threaded version of the BNC connector. The interface specifications for the TNC and many other connectors are referenced in MIL-STD-348. The connector has a 50 Ω impedance and operates best in the 0–11 GHz frequency spectrum. It has better performance than the BNC connector at microwave frequencies.

# SCALABLE READER

# NT 1004R

### LED Indicators

Bi Colored LED Indicators to notify power, card detection, card rejection.



### Sensing Range

The wireless detection or sensing range does not exceed 15 Meters



### TNC

The TNC Threaded Neill–Concelman connector is used to connect antenna with reader.



### Hardware

Uses Impinj technology for RFID to identify, locate, authenticate, and engage each item



## READING RANGE

Nundnet NT 1004R is designed to sense Gen2 EPC global for multi frequency 860 ~ 960 MHz. Ultra High Frequency (UHF) passive RFID Tags, and an ideal sensing range upto 15M.

## HOUSING

Nundnet NT1004R enclosure can be subjected to a jet of water from a nozzle of 12.5 mm diameter at a distance of 2.5 ~3 M. The water flow rate can be 100 l/ min applied for a time of 1 min /m<sup>2</sup>, with a minimum of 3 minutes. Hence IPX6 rating means that water cannot penetrate into the device in such a quantity or in such a position that can prove risky for the operation of unit. The IP X6 rating insures that the device can be used for outdoor applications like car parking etc.

## FCC COMPLIANCE

Nundnet NT 1004R equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. This device is designed to provide the reasonable protection against harmful interference in a residential installation.

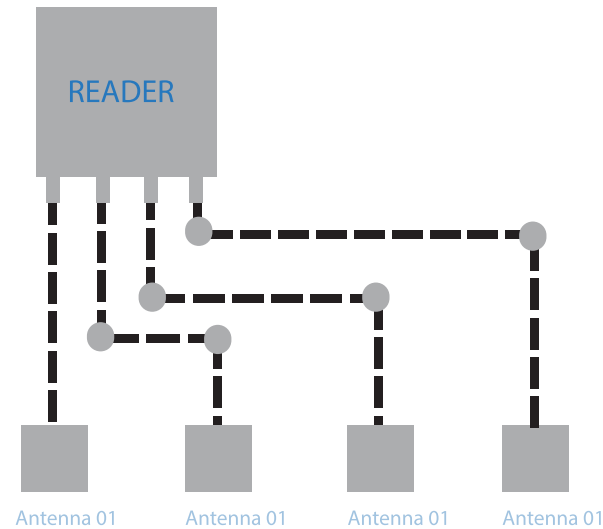
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

# SPECIFICATIONS

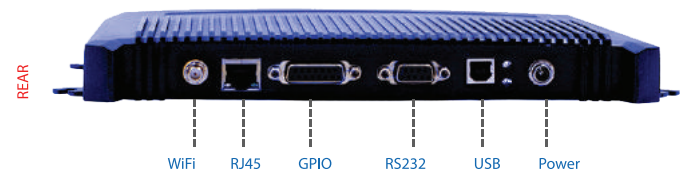
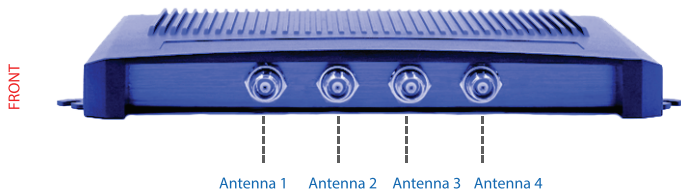
COMMUNICATION		
Operating frequency	A	865 ~ 868 MHz(EU)
	B	902 ~ 928 MHz(US)
Protocol	ISO 18000 - 6B/6C	
Operation mode	EPC GEN2 Real time monitoring, Trigger, Answer	
Interface	RS232, RS485, TCP/IP, USB (option)	

PARAMETERS	
Reading range*	1~15 Meters
RF power	30 dBm ( adjustable)
Antenna ports	4
Antenna connector	TNC, MIL-STD-348
RSSI	Received Signal Strength Indicator supported
Detection speed	700 units per second
Tag buffer size	1000 units for 96bit EPC

## APPLICATION



## FRONT & REAR VIEW



\* Effective distance depends on antenna, tag and environment.

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# SCALABLE READER

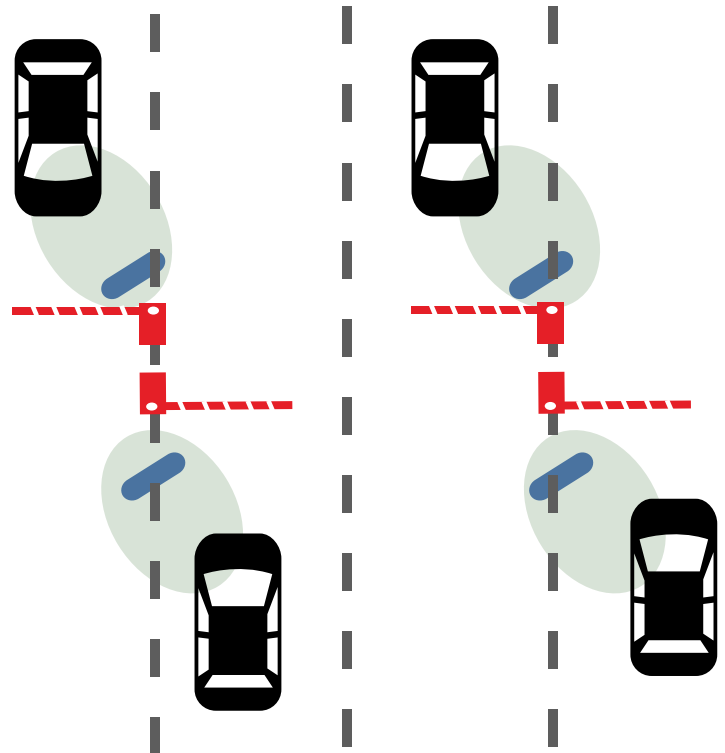
# NT 1004R

GENERAL	
Ingress Protection	IP x6
Temperature	Operating -20°C ~ 55°C, Storage -20°C ~ 85°C
Relative humidity	5~ 90%
Dimensions (mm)	270 x 180 x 27 (LxWxH)
Certifications	FCC, CE, RoHS

MECHANICAL	
Housing	Cover ABS ( Acrylonitrile Butadiene Styrene )
Mounting	Wall, Surface
Weight	1.5Kg (1500grams) net/ 2.0 Kg (2000 grams) gross

ELECTRICAL	
Operating voltage	12V
Current	< 1.2 A

## ILLUSTRATION



## ORDERING METHOD

Nundnet NT 1004RX 4 Channel UHF scalable long range reader with TNC connectors for antenna, RS 232, RS 485,WiFi, TCP/IP, GPIO, USB port (optional), 12V /1.5A

X : A 902 ~ 928 MHz., B 865 ~ 868 MHz.,  
C 922 ~ 928 MHz.

