

RFID TECHNOLOGY LONG RANGE READER

20 Meters

Nundnet NT 920P



Nundnet NT 920P is an elegant and robust (RFID) Radio Frequency Identification reader in compliance with EPC GEN 2 (ISO18000-6C) ISO18000-6B. Built-in modules are RF module with transmission power of 30 dBm & an antenna with gain of 12 dBi.

TCP/IP, RS232 Weigand & serial port RS 485 is available for communication. The reader is available with several operation frequencies like 865~ 868 MHz, 902 ~ 928 MHz (can be customized) and an ideal sensing range for reading of tags or related device is 20M.

An IP 65 rating insures that device can resist penetration of water to avoid risk.

KEY FEATURES

Built-in antenna with gain of 12dBi
Built-in RF Module 30 dBm adjustable
865~ 868 MHz, 902 ~ 928 MHz (customized)
IP 65 ingress protection rating
TCP/IP, Wiegand, RS232, RS 485 ports
EPC Gen II (ISO 18000-6C), ISO 18000-6B
Ideal sensing range *~20M

Wireless Frequency

Available in various operating frequencies
865~ 868 MHz, 902 ~ 928 MHz (customized)



Weather Proof Housing

IP 65 rated, Protects from powerful water jets, thereby is waterproof & dust proof.



Hermetically Protected Housing

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



LED Indicators

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



Sensing Range

The wireless detection or sensing range does not exceed 20 Meters



INTERFACE

Nundnet NT 920P is developed & designed for easy integration into existing digital & electronic management systems in the industry, viz. access controls, car parking & vehicle access control, retail & property management, ID access control for offices and private buildings, Handfree operation. Communication interfaces are RS232 RS485 for serial communication, open standard industrial protocol wiegand and TCP/IP.

MODULATION

Nundnet NT 920P uses Amplitude-shift keying (ASK), that represents the digital data as variations in the amplitude of a carrier wave. Here the binary symbol 1 is represented by transmitting a fixed-amplitude carrier wave & fixed frequency for a bit duration of T seconds. If the signal value is 1 then the carrier signal will be transmitted; otherwise, a signal value of 0 will be transmitted. This is the most sophisticated scheme of modulation which represent the data in groups using an additional amplitude levels.

READING RANGE

Nundnet NT 920P are designed to sense Gen2 EPC global are multiple frequencies from 860 ~ 960 MHz. Ultra High Frequency (UHF) Passive RFID Tags, and an ideal sensing range unto 20 Meters.

ISO 18000-6B

It defines the air interface for radio frequency identification (RFID) devices operating in the 860 MHz ~ 960 MHz Industrial, Scientific, and Medical (ISM) band used in item management applications. It provides a common technical specification for RFID devices.

HOUSING

NT 920P enclosure can be subjected to a jet of water from a nozzle of 6.3 mm diameter from all the directions. The test duration is 15 minutes for 12.5 liters per minute at pressure of 30 kPa at distance of 3 m. Hence IP65 rating means that water cannot penetrate into the device in such a quantity or in such a position that can prove risky for operation of unit. IP66 insures the protection from total dust ingress & high pressure water jets from any direction.

ISO 18000-6C

It defines air interface parameters for tags operating within the frequency range of 860~960 MHz and allows for use of different frequencies in different regions from within this range. Nundnet NT 920P offers frequency range of 865~ 868 MHz, 902 ~ 928MHz & can be customized in special cases.

FCC COMPLIANCE

Nundnet NT 920P 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

LONG RANGE RFID READER

NT 920P

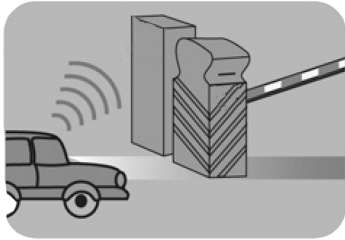
COMMUNICATION	
Operating frequency	A: 865~ 868 MHz, B: 902 ~ 928 Mhz C: customized
Modulation	PR-ASK, ASK
Communication	TCP/IP, RS232, RS 485, Wiegand
Supported transponders	EPC Gen 2 (ISO 18000 - 6C), ISO 18000-6B
GENERAL	
Ingress Protection	IP 65
Temperature	Operating -20°C ~ 55°C, Storage -20°C ~ 85°C
Relative humidity	5~ 90%
Dimensions (mm)	445 x 445 x 55 (LxWxH)
Certifications	FCC, CE, RoHS

ANTENNA PARAMETERS	
Reading range*	~20 Meters
Transmission power	30 dBm (adjustable)
Receiver sensitivity	-85 dBm
Antenna gain	12 dBi

MECHANICAL	
Housing	Cover ABS (Acrylonitrile Butadiene Styrene)
Mounting	Wall, Surface
Weight	5.0 Kg (5000grams)

ELECTRICAL	
Operating voltage	12V
Current	< 1.5 A

APPLICATION



Car parking & vehicle access control



ID access control for offices & private buildings

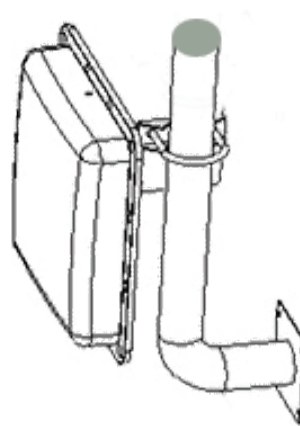


Handfree operation

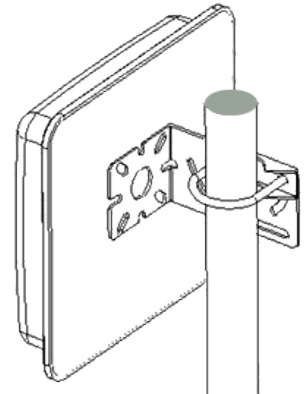


Retail & property management

INSTALLATION

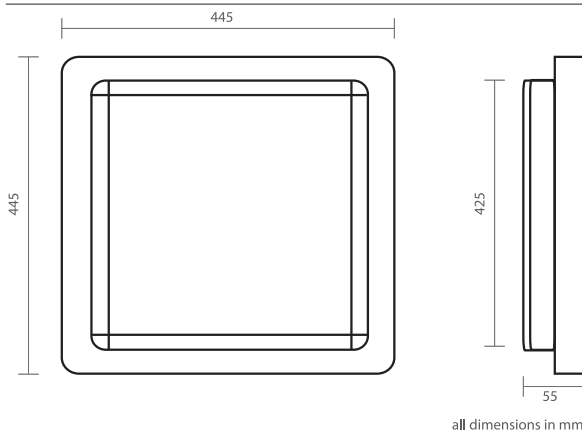


Stand mount



Wall mount

DIMENSIONS



ORDERING METHOD

Nundnet NT 920 P XY		Long range UHF RFID reader 20M, IP 65 rating
X	A:	865~ 868 MHz,
	B:	902 ~ 928 Mhz
	C:	customized
Y	D:	RS 232, RS 485, Wiegand
	E:	RS 232, TCP/IP
	F:	RS 232, WiFi
	G:	RS 232, WiFi, RCP/IP

* Effective distance depends on antenna, tag and environment.

Nundnet, the Nundnet logo, and other trademarks associated with Nundnet products referred to in this publication are trademarks of Nundlab, Inc. USA or its affiliates. Product specifications and availability are subject to change without notice. ©Copyright 2017, Nundlab, Inc. USA, All rights reserved.

