NORTECH

Product Catalogue

- Access Control
- Readers and ID Devices
- Long-Range Identification
- Vehicle Detection and Parking

nortechcontrol.com

Issue 1.1

Contents

Introduction

Welcome to the Nortech Product Catalogue. We hope you find this document useful.

Nortech supplies and supports a wide range of people and vehicle access products that can be combined to provide complete solutions.
To help you to find the right products for your project, they are divided into four categories.

We hope that you can find what you are looking for. If you need help, feel free to contact our sales team on sales@nortechcontrol.com or call +44 (0) 1633 485533.
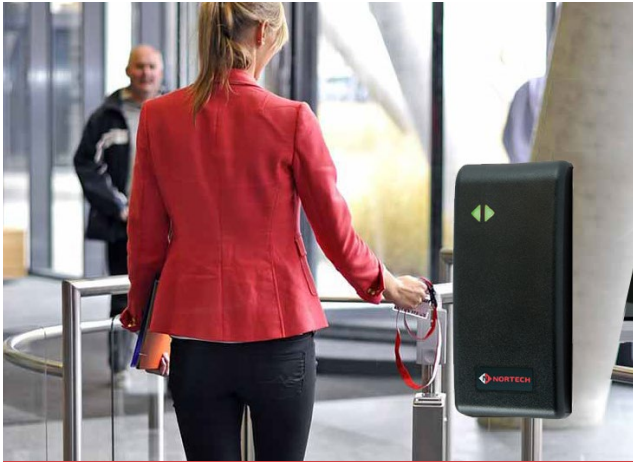
Access Control

The hardware and software components that receive credential information from readers and other input devices, check validity and control access to restricted areas by operating door locks, vehicle barriers, turnstiles, etc.

Readers and ID Devices

All types of electronic ID card readers, cards and fobs as well as biometric readers and hands-free readers.

Long-Range Identification

A selection of long-range vehicle identification systems including a choice of long-range vehicle tag readers and Automatic Number Plate Recognition (ANPR) systems.

Vehicle Detection and Parking

A range of market leading vehicle detectors, vehicle counting systems and components, and flexible parking management solutions.

Access Control

OEM Access Control

DQ-S2-PH

Two reader DeltaQuest interface module in plastic enclosure with integral 3A 12V PSU and intelligent fuse board

▶ Universal OEM reader controller provides I/O support for PC-based access control or membership software.

▶ Up to 32 access points that use ID devices can be supported via a single USB port or a TCP/IP network connection

▶ Supports most reader technologies and output formats including Wiegand, Clock & Data, RS232 and RS485

▶ Auto-discover software feature enables fast and accurate network configuration Intelligent fuse board enables remote status monitoring

▶ Comprehensive range of configuration and diagnostic tools avoid the need for DIP switch settings on the PCB

▶ Firmware upload from software facilitates updates without the need for site visits

DQ-S2-PX

Two reader DeltaQuest interface module PCB
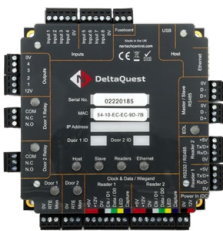
DQ-SW-01

Configuration and diagnostic software for DeltaQuest interface modules

DeltaQuest Controller Integration

Discover the huge variety of Nortech and 3rd Party Readers that can integrate with DeltaQuest, whether connecting via RS232, Clock & Data or Wiegand.

READER TECHNOLOGIES

| QR Code & Barcode | Smartcard (LEGIC, Mifare, HID) 13.5 MHz | Proximity Card 125 KHz | Face ID | Biometrics | Mobile ID |

Up to 2 reader interfaces per DeltaQuest

RS232 | RS485 | Clock & Data | Wiegand

DeltaQuest Master

Up to 32 access points

DeltaQuest Slave

| Gates | Turnstiles | Mag Lock | Vehicle access (barrier) | Roller shutters |

RELAY

Direct integration into hardware

Real time event information

API Simple + powerful API

One-off hardware cost, no software licenses.

Standalone Access Control

N-QUEST-01

Standalone proximity card reader/controller with 2 master cards

CRC200+

2-door, 2-reader access controller for up to 65,000 sequential cards or 8,000 random cards. Standalone or online to Norpass3

Nanoquest Managed Credential Packs

NP-CARD-PK-01

Pack of 10 proximity cards with shadow cards in filing wallet including a batch enrolment card and a card marker pen

x10

NP-CARD-PK-03

Pack of 40 proximity cards with shadow cards in filing wallet including a batch enrolment card and a card marker pen

x40

NP-CARD-PK-02

Pack of 25 proximity cards with shadow cards in filing wallet including a batch enrolment card and a card marker pen

x25

NP-FOB-PK-01

Pack of 10 fobs with shadow cards in filing wallet including a batch enrolment card and a card marker pen

x10

NP-FOB-PK-02

Pack of 25 fobs with shadow cards in filing wallet including a batch enrolment card and a card marker pen

x25

NP-FOB-PK-03

Pack of 40 fobs with shadow cards in filing wallet including a batch enrolment card and a card marker pen

x40

NanoQuest Compact Standalone Access Control System

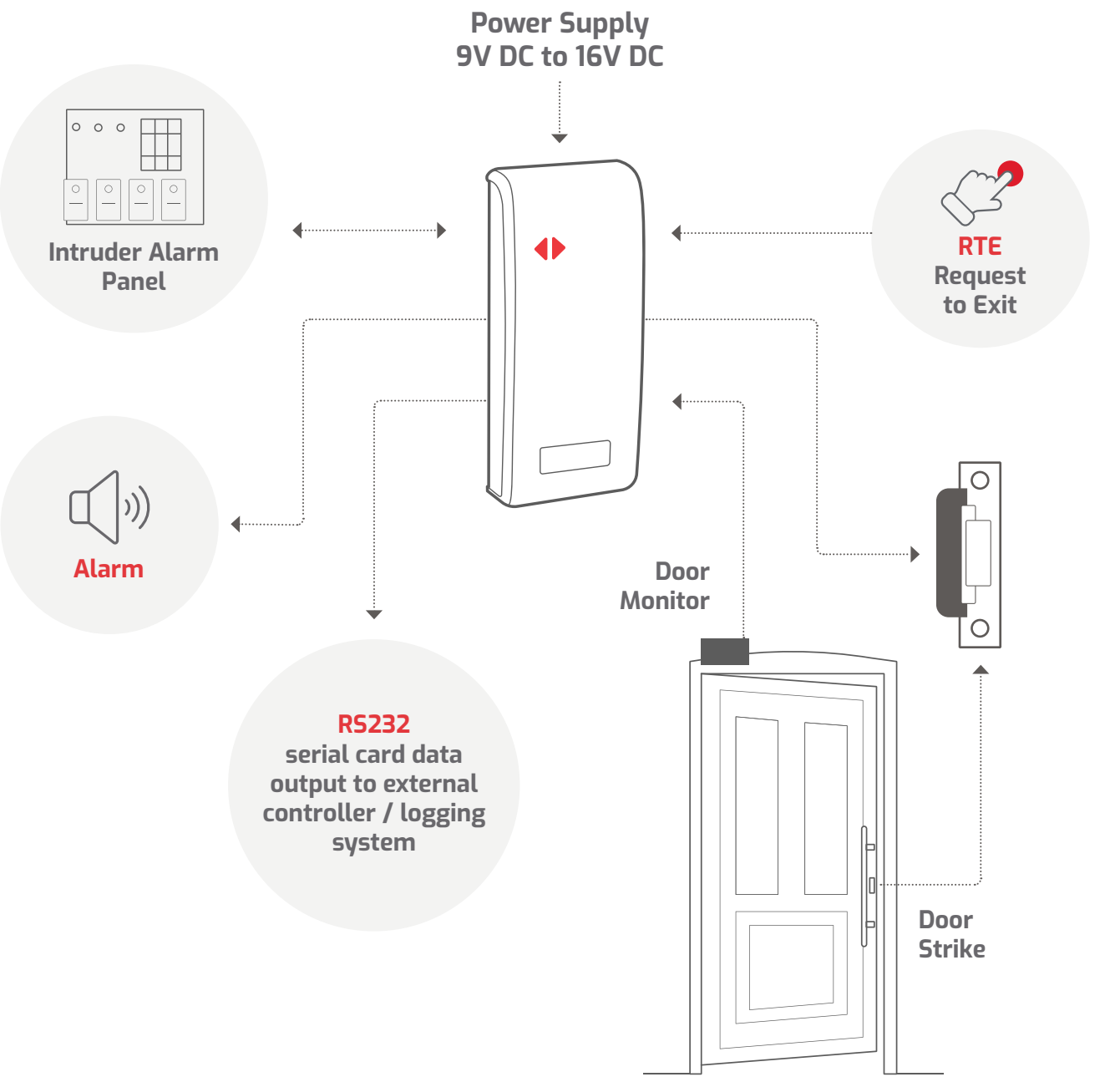**Master Card**

For adding and removing cards and setting features

Master

Auxiliary Card

For gaining access and controlling auxiliary output

Aux

User Card

For gaining access

User

**Power Supply
9V DC to 16V DC**

Intruder Alarm Panel

**RTE
Request
to Exit**

Alarm

**RS232
serial card data
output to external
controller / logging
system**

**Door
Monitor**

**Door
Strike**

Norpass3 Access Control Software Package

NORPASS

Feature-rich access control solution that comes with licence-free software.

NETWORKED ACCESS CONTROL

The Norpass access control system comes with a range of key features, many of which are provided through it's licence-free Norpass3 software. Some of these features, if available, would usually involve an additional software licence cost when supplied by our competitors. See the comparison below:

Feature/Benefit MIFARE	Norpass	Competitors
Free upgrades	✅	✅
Virtual Controller Setup	✅	❌
Wizard Setup	✅	❌
Seamless online integration of standalone systems	✅	❌
Open Door Function	✅	✅
Live Events	✅	✅
Card designer	✅	€
User Image Verification	✅	✅
User management	✅	✅
1 door per unit	✅	✅
2 doors per unit	✅	❌
4 doors per unit	✅	❌
Areas	✅	€
Basic Reporting	✅	✅
Advanced Reporting	✅	€
Roll call and muster reporting	✅	€
Triggers and actions	✅	✅
ANPR integration	✅	✅
Biometric integration	✅	✅
Fire alarm integration	✅	✅
Anti-passback	✅	€
Timesheet & Timeline	✅	€
Multiple Operator Levels	✅	€
Occupancy Management	✅	€

✅ Provided with no additional charge

€ Available at a cost

❌ Not available

Norpass3 Access Control Software Package

NORPASS3

Windows based access control software - Master workstation for up to 64 controllers with web server for additional workstations. Network communication via TCP or RS485 (requires USB/RS485 converter)

USB-485

USB to RS485 converter enables the control of up to 32 controllers over a single RS485 network

DT1-EM1-0000

Compact USB desktop enrolment reader. Reads 125kHz EM variants and derivatives

DT1-ISO-0000

Compact USB desktop enrolment reader. Reads serial numbers of 13.56MHz technology cards and fobs

DT1-MIF-1000-000

Compact USB desktop enrolment reader. Reads Nortech secure sector on a 13.56MHZ Mifare smart card

Norpass Networked Access Controllers

CRC220-48

Replacement/upgrade PCB for CRC220 housing

CRC220-48-ENC-2

2 Door read In/free exit RS485 access controller with 3A 12V PSU in plastic enclosure

CRC220-48-ENC-4

4 Door read In/free exit RS485 access controller with 3A 12V PSU in plastic enclosure

CRC221-48

Replacement/ upgrade PCB for CRC221 housing

CRC221-48-ENC-1

1 door read In/read out RS485 access controller with 3A 12V PSU in plastic enclosure

CRC221-48-ENC-2

2 door read In/read out RS485 access controller with 3A 12V PSU in plastic enclosure

TCP/IP-220

Upgrade TCP/IP interface module for fitting to CRC220 or CRC221. Allows up to 32 controllers linked over an RS485 network to be controlled via a TCP/IP port

CRC200+

2-door, 2-reader access controller for up to 65,000 sequential cards or 8,000 random cards. Standalone or online to Norpass3

CRC200+ENC

2-door, 2-reader access controller for up to 65,000 sequential cards or 8,000 random cards. Standalone or online to Norpass3. In plastic enclosure with 3A 12V PSU

▸ **Suitable for controlling access through doors, barriers, rising bollards, turnstiles etc.**

▸ **Can be configured for one or two doors**

▸ **Compatible with most reader technologies thereby supporting a wide range of applications**

▸ **Readily incorporated into Norpass3 to reduce cost of expansion**

▸ **Comprehensive range of configuration and diagnostic tools avoid the need for DIP switch settings on the PCB**

▸ **Block validation and voiding for quick and easy management**

Readers & Credentials

Proximity Card Readers - 125kHz

MP1-EM1

Mullion style 125kHz EM proximity reader with 500mm pigtail or terminal block

WP1-EM1

Wall switch style 125kHz EM proximity reader with 500mm pigtail or terminal block

WP1-DP1

Wall switch style 125kHz DualProx proximity reader with 500mm pigtail or terminal block

MP1-DP1

Mullion style 125kHz DualProx proximity reader with 500mm pigtail or terminal block.

WP2-EM1

Flush-mount wall switch 125kHz EM proximity reader with 500mm pigtail or terminal block

PP1-EM1

Panel-mount 125kHz EM proximity reader with 500mm pigtail or terminal block

VP1-EM1

Vandal Resistant 125kHz EM proximity reader with 500mm pigtail or terminal block

PP1-DP1

Panel-mount 125kHz DualProx® proximity reader with 500mm pigtail or terminal block

Smart Card Readers - 13.56MHz

VP1-DP1

Vandal resistant 125kHz DualProx® proximity reader with 500mm pigtail or terminal block

SP1-EM1

Slimline 125kHz EM proximity reader with 500mm pigtail or terminal block

MP1-LEG-XXX

Mullion style reader. Customer specific data from a secure segment on a 13.56MHz LEGIC Prime or LEGIC Advant smart card or Pigtail or Terminal block

MP1-MIF-XXX

Mullion style reader. Nortech secure sector on a 13.56MHZ Mifare smart card. Site code and sequential card numbers with customer key - Pigtail or Terminal.

SP1-DP1

Slimline 125kHz DualProx® proximity reader with 500mm pigtail or terminal block

WP1-MIF-XXX

Wall switch style. Nortech secure sector on a 13.56MHZ Mifare smart card. Site code and sequential card numbers with customer key or Pigtail or Terminal block

WP1-LEG-XXX

Wall switch style. Customer specific data from a secure segment on a 13.56MHz LEGIC Prime or LEGIC Advant smart card or Pigtail or Terminal.

MP1-SPACER

8mm stand-off spacer for mullion style 13.56MHz reader to improve read range when mounted on metal. Charcoal grey

Smart Card Readers - Serial Number Only

MP1-ISO

Mullion style multi-ISO reader with 500mm pigtail or terminal block. Reads serial numbers of 13.56MHz smart cards.

WP1-ISO

Wall switch style Multi-ISO 13.56MHz reader with 500mm pigtail or terminal block. Reads serial number of 13.56MHz smart cards

WP1-LEG

Wall switch style. Serial numbers of 13.56MHz (ISO15693 and ISO14443A standards) technologies plus LEGIC Prime - Pigtail or Terminal.

Nortech Reader Comparison

	Mifare UID (MIFARE)	LEGIC UID/ Segment (LEGIC)	Mifare Sector (MIFARE) Customised	EM Variants (125kHz Prox)	EM/PAC Variants (125kHz Prox)
Output Formats					
Clock & Data (10 Digit)	✓	✓	✓	✓	✗
Wiegand	✓	✓	✓	✓	✓
RS232	✓	✓	✓	✓	✓
Supported Credentials					
LEGIC Advant	✓	✓	✓	✗	✗
LEGIC Prime	✗	✓	✓	✗	✗
Mifare	✓	✓	✓	✗	✗
Norprox	✗	✗	✗	✓	✓
EM4102	✗	✗	✗	✓	✓
Models					
MP1	✓	✓	✓	✓	✓
WP1	✓	✓	✓	✓	✓
WP2	✗	✗	✗	✓	✓
PP1	✗	✗	✗	✓	✓
VP1	✗	✗	✗	✓	✓
Extended Features					
Free upgrades	✓	✓	✓	✓	✓
Virtual Controller Setup	✓	✓	✓	✓	✓
Wizard Setup	✓	✓	✓	✓	✓
Seamless online integration of standalone systems	✓	✓	✓	✓	✓
Open Door Function	✓	✓	✓	✗	✗
Live Events	✗	✗	✗	✓	✓

Nortech Access Control Credentials

NP-CARD-PK-00

Randomly numbered proximity cards, blank both sides. Suitable for dye- sublimation printing. Pack of 10

x10

NP-FOB-PK-00

Randomly numbered proximity key fobs. Pack of 10

x10

NP-CARD-S

Sequentially numbered proximity cards, blank both sides. Suitable for die-sublimation printing. Clock & Data format. Customer must supply site code and card number range with order

x25

NP-FOB-S

Sequentially numbered proximity key fob. Clock & Data format. Customer must supply site code and card number range with order

x25

MIF-FOB-PK-00

Mifare 1K key fob, unprogrammed. Pack of 10

x10

Multi-technology Readers - Nedap

9566945

NVITE is a multi-technology reader that enables contactless identification

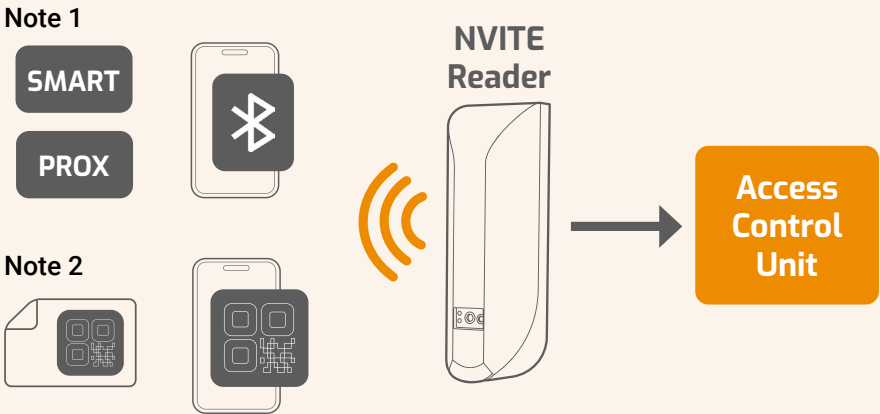The reader supports reading a wide range of credential technologies

- ▶ **Supports RFID Smartcards, RFID Proximity cards, QR codes, Bluetooth and NFC**
- ▶ **Enables contactless identification**
- ▶ **Mobile ID Protocol for BLE and NFC implementation with third party Apps**
- ▶ **OSDP v2 supported including secure channel protocol**
- ▶ **Reads multiple credential technologies**

Compatible with:

125kHz Prox · LEGIC · MIFARE · Bluetooth · NFC

NVITE Reader Supported Credentials

Note 1
SMART
PROX

Note 2

NVITE Reader

Access Control Unit

Note 1: In order to use BLE or NFC virtual credentials, an appropriate third party mobile app with supporting infrastructure is required.

Note 2: In order to use QR-codes as credentials, a third-party QR-code generator is required.

Motorised Card Capture Readers

MRC350-XXX

Motorised card capture reader supports most technologies with transparent forwarding of card data to the controller. Readers must be free issued to Nortech. For use with ISO cards only.

MRC350-GEN-T

Motorised card capture reader. Designed to allow an integrator to fit a third party proximity or smart card reader

The MRC350 card capture reader design is ideal for fitting into turnstiles and speed gates to read proximity and smart cards. Its motorised card slot provides the capability to capture or return a card as instructed by the access control unit.

The compact unit is easily mounted into most standard turnstile and speed gate systems making it the choice of many leading turnstile manufacturers. Its ability to accommodate third party reader heads makes it compatible with almost all card technologies.

Typical Installation

Card Slot

Card Read Position

Reader Head

Card Collection Bin
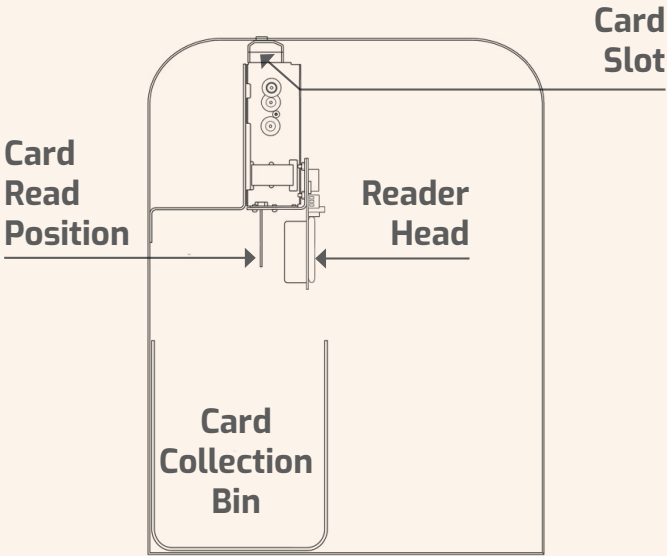
Access Control Card Validation & Capture Station

Access Control Pedestal (ACP)

The access control card validation and capture pedestal (ACP) product is available in several versions to suit customer specific needs. Options include the integral card reader, access control unit and assistance intercom
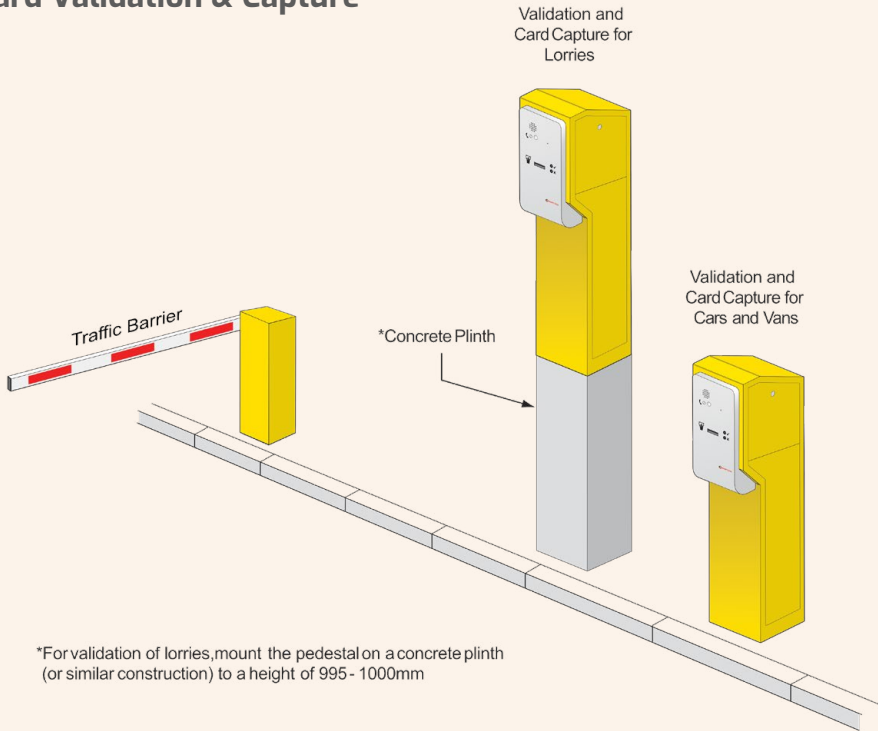
These options are reflected in the ordering code as follows:

ACP CC RR FF

CC
Control Panel

00
Nortech control panel (CRC200+) fitted

01
No control panel - to be supplied and fitted by installer

RR
Integral Card Reader

00
Nortech - EM1

01
Nortech - ISO

02
Third party (free issue)

FF
Intercom Options

00
Not fitted

01
Fitted with Aiphone slave intercom

02
Includes mounting brackets for fitting a Telguard GSM intercom
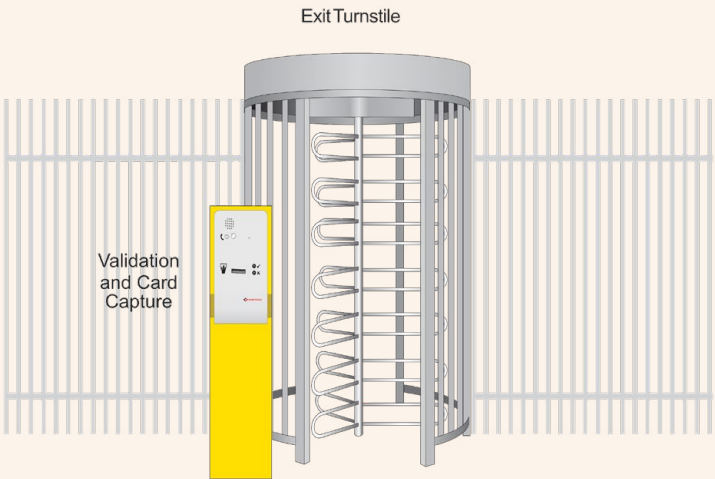
Example

ACP-00-01-01

is a card capture pedestal fitted with a CRC200+ control panel, integral ISO card reader and Aiphon slave intercom

Vehicle Card Validation & Capture

Validation and Card Capture for Lorries

Validation and Card Capture for Cars and Vans

Traffic Barrier

*Concrete Plinth

*For validation of lorries, mount the pedestal on a concrete plinth (or similar construction) to a height of 995 - 1000mm

People Card Validation & Capture

Exit Turnstile

Validation and Card Capture

▸ **Support any ISO proximity or smart card technologies using integrated third-party readers**

▸ **Captures or returns cards after reading**

▸ **Card capture for expired cards and lost and stolen cards**

▸ **Elegant roadside pedestal finished to customer livery**

▸ **Can be integrated into existing third-party access control system**

Long-Range Identification

ANPR Lumo - Automatic Number Plate Recognition

9986138

ANPR Lumo for vehicle access control applications.
Easy user configuration. Built-in Wiegand modes

▸ All-in-one licence plate camera (standalone compatible)

▸ Barrier controlled and free-flow applications

▸ Captures number plates from 2-10 metres

▸ ANPR removes need to purchase, distribute and manage vehicle tags, reducing initial investment and running costs

▸ Licence plates can be managed on the same system as other access control credentials, avoiding the need to invest in separate people and vehicle access systems

SSP-ANPR

Stainless steel post for mounting ANPR reader

PSU2

Power Supply 24V DC, 1.25A, 30W

SSDP-ANPR

Stainless steel dual height Post for mounting ANPR and traffic signal
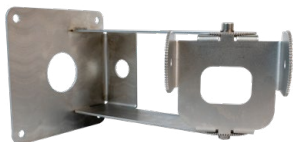
uPASS Go – UHF Long-Range Vehicle Identification

9234195

uPASS Go (ETSI)
including Mount Set

9567593

Mount Set Extension
uPASS Go

9567658

Weather Protection
Hood uPASS Go

uPASS Target – UHF Long-Range Vehicle Identification

9217363

uPASS Target
Long range AVI reader
with identification
at up to 10 metres

9219021

uPASS Target external
antenna

9218335

uPASS Target weather
protection hood

5626595

uPASS Target pole
mounting bracket

UHF Tag

uPASS TARGET
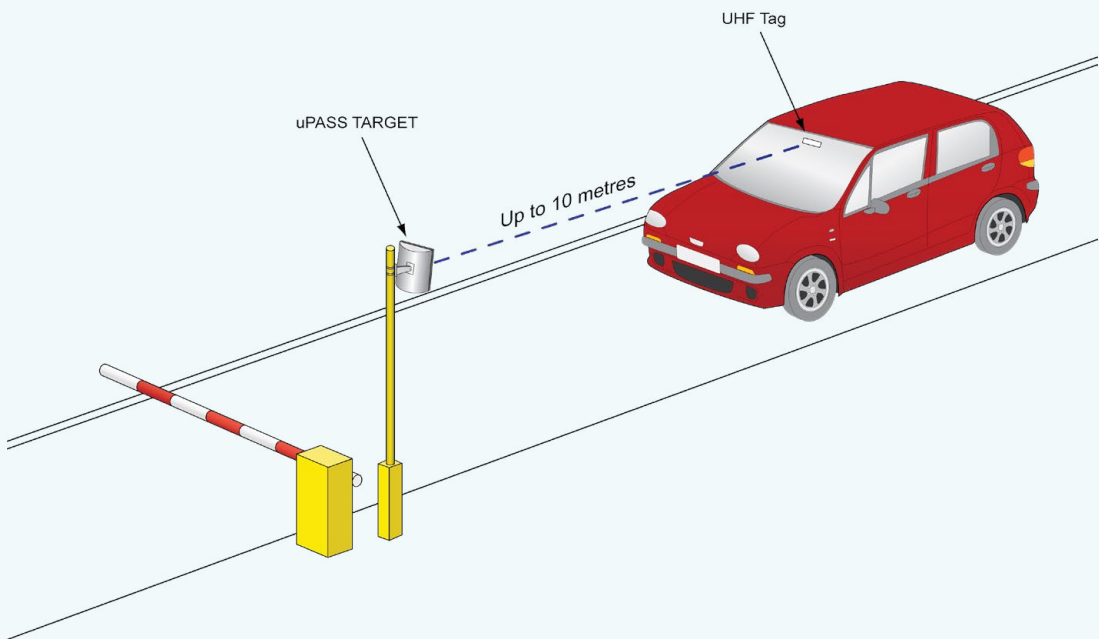
Up to 10 metres

▶ **Reads up to 10 metres with on site adjustable read range**

▶ **Operates with passive UHF tags (EPC GEN 2)**

▶ **Compatible with a wide-range of access control and asset management systems**

uPASS Credentials

9946918 (UPT18)

uPASS tamper-proof long-range UHF tag for windshield mounting. Programmed with secured customer specific ID number. Destructs upon removal. (minimum order 200)

9219641

uPASS UHF heavy duty tag - small (min order 10)

9215255

UHF Exterior tag, suitable for mounting on headlights

9942343 (UPC43)

UHF - Mifare 1K card. Credit card sized ISO credential with combined UHF and HF Mifare technologies (minimum order 100)

9206388

Combi Card
UHF - Mifare DESfire
(minimum order 100)

9954104

Combi Card
UHF - HID Prox
(minimum order 100)

9943943 (UPC97)

Long-range UHF tag in ISO card format, not suitable for windscreen mounting. Programmed with secured customer specific ID number. (minimum order 25)

9243960

Combi Card
UHF - Legic Advant
(minimum order 100)

9959343

Combi Card
UHF - HID iCLASS
(minimum order 100)

Transit – Microwave Long-Range Vehicle Identification

9229206

TRANSIT Ultimate
Custom Programming
RS232/HID

9230149

Compact button -
Custom programming

9875980

TRANSIT Long-range
heavy duty single ID tag.
Mounts permanently
externally on a vehicle
or container (minimum
order 10)

9948538

TRANSIT Prox-Booster
2G for vehicle and driver
identification (minimum
order 10)

9948554

Long-range dual ID in
vehicle device to identify
both driver and vehicle.
Supports ISO 14443 and
15693 compliant 13,56
MHz credentials
(minimum order 10)

9218327

Transit Ultimate
weather protection
hood.

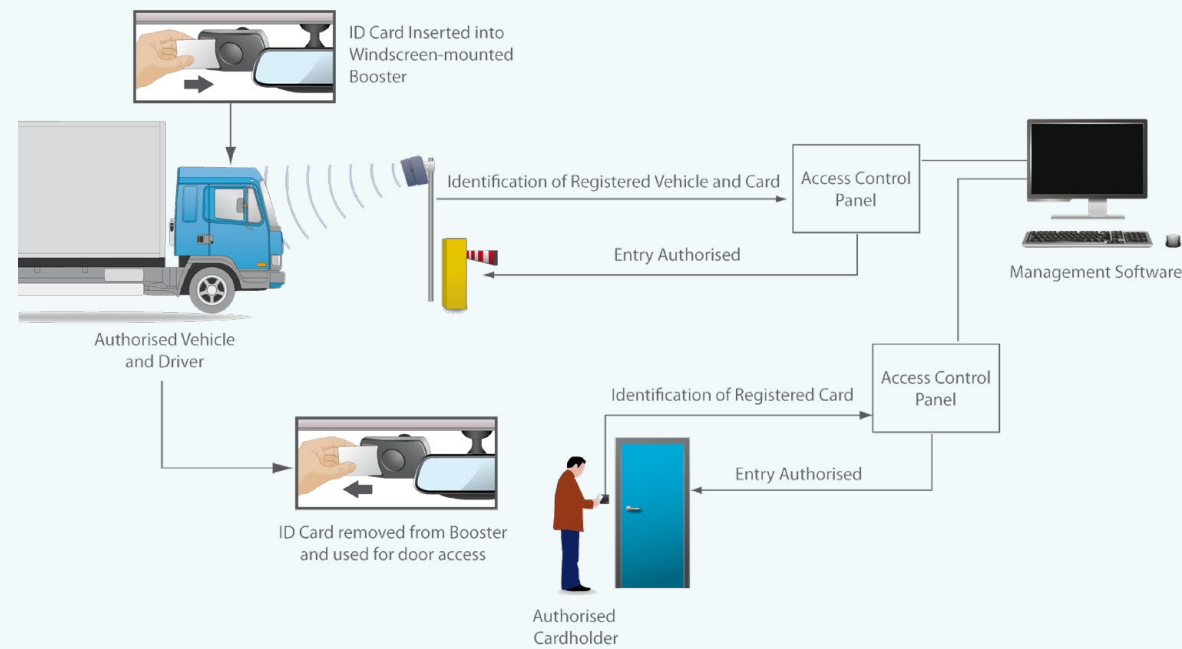### 5626595

TRANSIT pole mounting
bracket

9948546

TRANSIT Prox-Booster 2G for driver identification (minimum order 10)

▸ **Extends the range of proximity and smarts cards up to 10m**

▸ **Simultaneous vehicle and driver identification**

▸ **Identification up to 10 metres**

▸ **Easy mounting to vehicles windscreen**

ID Card Inserted into
Windscreen-mounted
Booster

Identification of Registered Vehicle and Card

Access Control Panel

Entry Authorised

Management Software

Authorised Vehicle
and Driver

Identification of Registered Card

Access Control Panel

Entry Authorised

ID Card removed from Booster
and used for door access

Authorised
Cardholder

NorParc Car Park Counting Software

NORPARC

Car park counting software. Includes count server and client front end packages. Requires additional counter licenses. Package includes USB-485 converter

NP-XXX

Norparc® counter license. One is required per physical count (1,2,4 per NCT200, depending on configuration)

NorVenue People Counting Software

NORVENUE

Venue count management software. Includes server and client software packages - Requires counter licence. Package includes USB-485 converter

VM-xxx

NorVenue® counter licence (per physical counter configured)
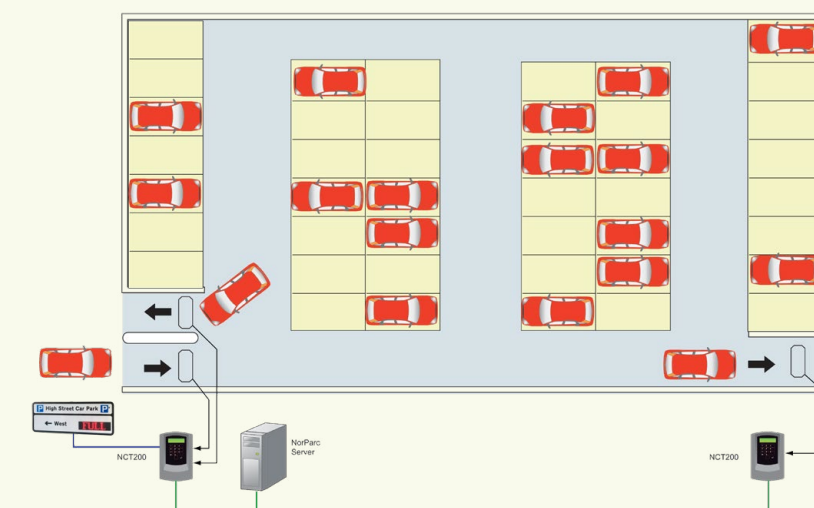
▸ Simple cost effective means of providing count management for a wide range of applications and any size of car park

▸ Flexible single module can provide up to 4 counters or one counter with up to 4 increment and 4 decrement inputs

Vehicle Detection & Counting

Online Counting Controllers

NCT200-48-ENC

4 Channel counter with VMS control bus and PC communication bus. Can work standalone or as part of a networked system using NorParc® software. Complete with PSU and enclosure

NCT200-TCP-ENC

4 Channel counter with VMS control bus and TCP/IP PC communication bus. Can work standalone or as part of a network system using NorParc® software. Complete with PSU and enclosure

NCT200-48

4 Channel counter with VMS control bus and PC communication bus. Can work standalone or as part of a networked system using NorParc® software. Capable of driving up to 8 addressable VMS

Standalone Counting Controllers

NCT100

Standalone 4 channel counter with VMS control bus. Capable of driving up to 4 individually addressable VMS

CPC202

Standalone shared occupancy access controller for up to 2 groups

CPC204

Standalone shared occupancy access controller for up to 4 groups

Variable Message Signs (VMS)

VMS-RGB-10A-STD

High Intensity RGB LED sign with 10cm high characters, capable of displaying count values and status messages. Fitted with rear mounting strips for post mounting

VMS-RGB-10A-T1

Multi-level sign housing with one high intensity RGB LED sign with 10cm high characters, Fitted with rear mounting strips for post mounting

VMS-RGB-WB-STD

Wall mounting bracket for standard VMS.

VMS-RGB-WB-TX

Wall mounting bracket for multi-level VMS.

VMS-RGB-10A-T2

Multi-level sign housing with two high intensity RGB LED signs with 10cm high characters, Fitted with rear mounting strips for post mounting

- ▸ **Large 5-digit full colour LED display**
- ▸ **LED optical system meets EN12966 standards and provides high optical performance**
- ▸ **Robust weatherproof aluminium housing (IP65)**
- ▸ **Fully compatible with Nortech count management systems**
- ▸ **Customisable design options including logo and colour options on the sign**
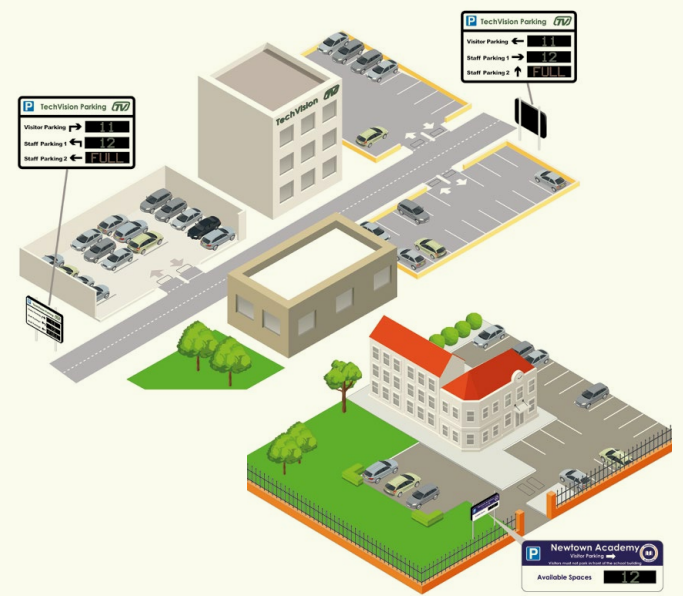
3-Series Parking Detectors

PD132

Miniature boxed single channel detector with basic features. Power requirement 230V AC

PD134

Miniature boxed single channel detector with basic features. Power requirement 12-24V AC/DC

PD232

Miniature boxed dual channel detector with basic features. Power requirement 230V AC

PD234

Miniature boxed dual channel detector with basic features. Power requirement 12-24V AC/DC

DU100

Detector diagnostic unit. Compatible with PD130, PD230 ranges

8-Series Parking Detectors

PD182

Miniature boxed single channel detector with extended features. Power requirement 230V AC

PD184

Miniature boxed single channel detector with extended features. Power requirement 12-24V AC/DC

PD282

Miniature boxed dual channel detector with extended features. Power requirement 230V AC

PD284

Miniature boxed dual channel detector with extended features. Power requirement 12-24V AC/DC

DU800

Detector diagnostic unit. Compatible with PD180, PD280 ranges

Detector Accessories

RB1

11 Pin relay base for detector

LP100

Loop cable 100m drum

FeeMaster Smart Parking Management System

Smart Entry Station

Roadside pedestal compatible with FeeMaster Smart System

Smart Exit Station

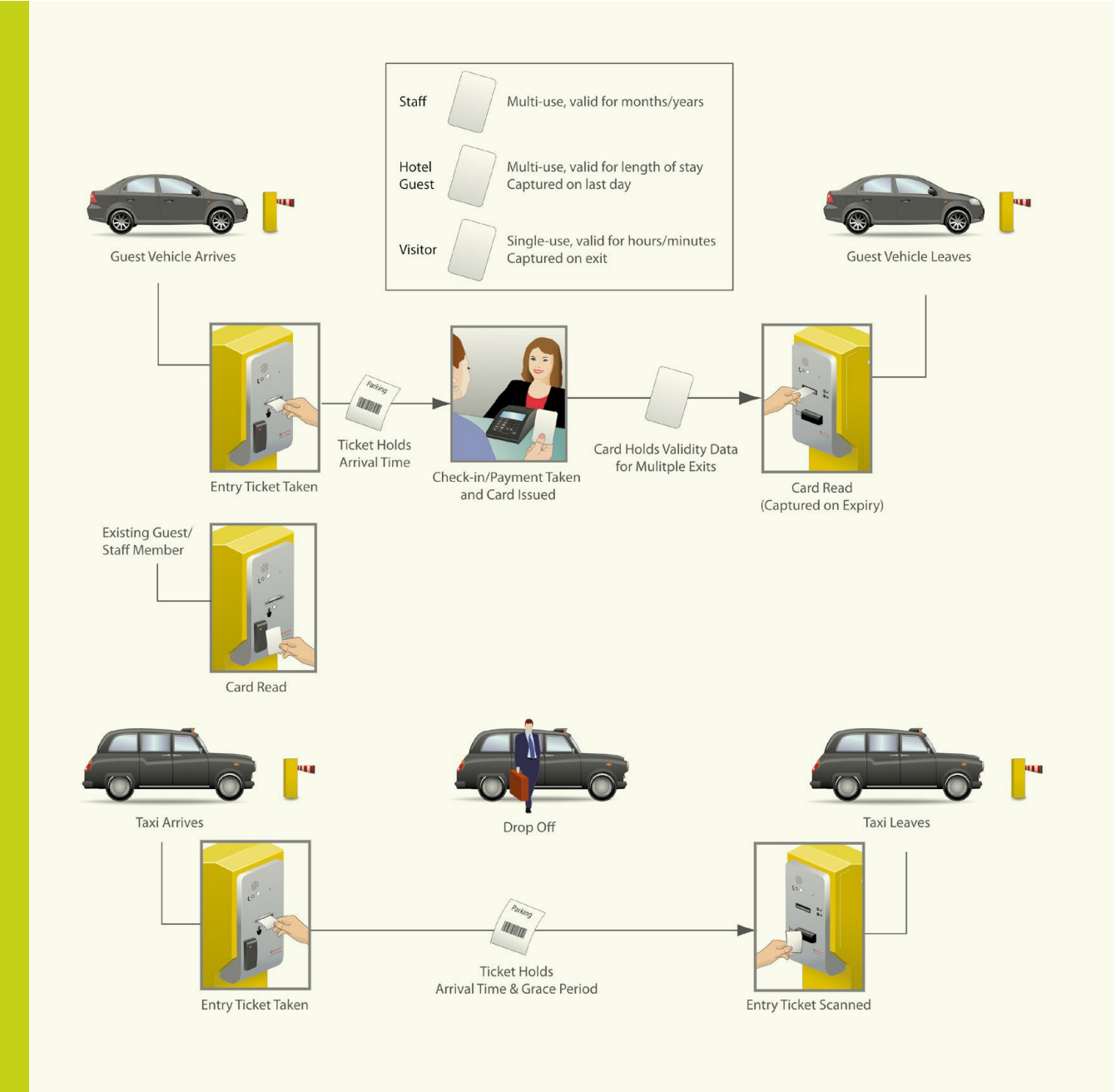Roadside pedestal compatible with FeeMaster Smart System

Encoder

FeeMaster Smart attendants console/encoder. Desktop unit with easy-to-use keypad, 4-line display screen & built-in card reader/encoder.

FeeMaster Smart Software

Parking management PC software, communicates with an attendants console via a USB/RS485 adaptor and interface cable

FeeMaster
Parking Management Software

FeeMaster

Staff		Multi-use, valid for months/years
Hotel Guest		Multi-use, valid for length of stay Captured on last day
Visitor		Single-use, valid for hours/minutes Captured on exit

Guest Vehicle Arrives

Guest Vehicle Leaves

Entry Ticket Taken

Ticket Holds Arrival Time

Check-in/Payment Taken and Card Issued

Card Holds Validity Data for Mulitple Exits

Card Read (Captured on Expiry)

Existing Guest/ Staff Member

Card Read

Taxi Arrives

Drop Off

Taxi Leaves

Entry Ticket Taken

Ticket Holds Arrival Time & Grace Period

Entry Ticket Scanned

NORTECH
PEOPLE & VEHICLE ACCESS SOLUTIONS

NORTECH DESIGNS, MANUFACTURES AND DISTRIBUTES PEOPLE AND VEHICLE ACCESS CONTROL SYSTEMS.

Based near Cardiff the capital of Wales, we have supplied products and solutions to the security industry for over 25 years as an independent British company.

Our in-house design team has extensive experience in all areas of product development, including hardware, firmware and software. We work closely with our chosen technology partners to provide first class solutions for our customers, and we are always looking to incorporate new ideas and technologies.

We encourage enthusiasm and high standards within our team, which is reflected in our long-standing Investors in People accreditation. Our planned and disciplined approach to product engineering ensures quality and reliability in both our product and services. We value our ISO9001:2015 quality standard certification and strive to maintain that standard. As a full member of the BSIA, we are an established and respected manufacturer in the British security industry. We are proud of the long term relationships that we have developed with stakeholders throughout our industry, and we look forward to supporting them for many years to come.