



PD170 DIN-RAIL SINGLE CHANNEL DETECTOR

The 7 series, the latest generation of Nortech Parking Vehicle Detectors, is designed to meet the markets' need for a more cost effective, 'plug and play' solution! Our legendary Automatic Frequency Selection (AFS) results in less set up time, simplifying the installation of complex multi-lane access control sites. AFS also ensures trouble free installation and improved sensitivity facilitating the reliable detection of vehicles in all conditions.

Unlimited PowerFail Memory and a sophisticated environmental tracking algorithm ensures that whether your site has a simple or complex configuration, these detectors just work, giving you peace of mind. Consuming less power and with a 5 year manufacturer's warranty, the 7 series offers a low cost of ownership and is available with DIN rail housing and relay base mounting. It is available in single and dual channel.

APPLICATIONS

- Parking barrier control
- Safety Loop
- Arming Control
- Motorised gates and doors
- Industrial control systems

SPECIFIC FEATURES

AFS

Automatic Frequency Selection (AFS) automatically examines the detector environment and sets the optimal operating frequency to ensure minimal interference and maximum reliability, significantly decreasing installation time. Frequency can also be manually set via the faceplate.

PowerFail Memory

In the event of a power failure, the PD170 will retain the presence of the vehicle when power is restored. The PD170 is also able to determine if a vehicle has driven onto the loop while the power is off, and detect it immediately when the power returns. This is most useful in applications where damage to vehicles could occur (E.g. Rising Bollards). The PowerFail memory is infinite.

Diagnostics

Comprehensive diagnostics capabilities allow for accurate diagnosis of loop and installation problems. This is made possible via Nortech's DU100 and DU700.

Permanent Presence

The output of the presence relay can be selected to maintain an output for an infinite period, eliminating premature barrier / gate / door closure.

ASB

Automatic Sensitivity Boost (ASB) facilitates the reliable detection of all vehicle combinations and high-bed vehicles by boosting the sensitivity to maximum after detection of a vehicle.

TECHNICAL DATA

Self-tuning Range

20 μ H to 1500 μ H

Sensitivity

4 step adjustable on the front panel:
Ranging from 0.01% Δ L/L to 0.1% Δ L/L
Automatic Sensitivity Boost (ASB) is switch selectable

Frequency

Automatic Frequency Selection (AFS) or select from 4 frequency bands 18-110kHz (Frequency is determined by loop geometry)

Presence Time

Permanent or limited selectable

Drift Compensation

Incorporated method of tracking changes caused by environmental conditions at a rate approximating 1% Δ L/L per minute

Anti-locking

Incorporated algorithm accommodates the influence of positive inductance changes to avoid detector lock-up

Relay Outputs

1 dedicated presence relay, and 1 pulse relay that can be configured to pulse on detect or pulse on undetect. The pulse duration is selectable between either 150ms or 250ms

Relay Mode

The Presence relay can be configured to operate as Fail Safe or Fail Secure

Protection

Loop isolation transformer, zener diode clamping, gas discharge tubes

Power

12-24V $\pm 10\%$ (AC/DC)
120V $\pm 10\%$ AC
230V $\pm 10\%$ AC

Connector

11 pin submagnal connector (JEDEC B11-88)
Also available in DIN rail mount unit with 2x 6way connectors

-40°C to +80°C

Operating Temperature

ORDERING INFORMATION

307FT0104	PD171 Din-Rail Single Channel 120V
307FT0105	PD172 Din-Rail Single Channel 230V
307FT0106	PD174 Din-Rail Single Ch AC/DC 12-24V