

3-Series Dual Channel Loop Detectors

Product Description

One of the most critical components of the whole vehicle access control system is the inductive loop detector. Nortech's detectors have been renowned for their reliability and durability for over many years.

Dual channel loop detectors are used to identify the presence of vehicles by means of two independent inductive loops buried under the road and can be used in almost any application.

Nortech's Dual channel detectors feature A-B logic and flexibility to eliminate cross-talk. All detectors are CE tested and approved. A compact detector diagnostic unit is available for extracting data from new and existing sites.



Features

PD230 - Vehicle Detector

- ▶ Compact size & elegant styling
- ▶ Flexible
- ▶ Automatic Sensitivity Boost (ASB)
- ▶ A-B Logic
- ▶ Fault monitor
- ▶ Diagnostic capabilities

PD239 - Card Based Vehicle Detector

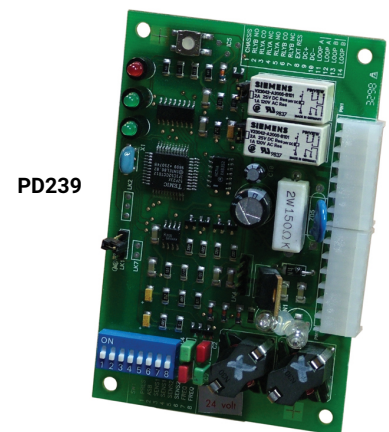
- ▶ Compact size
- ▶ Diagnostic capabilities
- ▶ Selectable permanent presence
- ▶ Loop isolation protection
- ▶ Loop frequency indication
- ▶ Automatic Sensitivity Boost (ASB)
- ▶ Selectable relay output configuration
- ▶ Loop fault monitor

DU100 - Detector Diagnostics Unit

- ▶ Compact, self-contained test
- ▶ Exclusive optical readout
- ▶ No service disruption
- ▶ Loop diagnosis
- ▶ Historical data available

Applications

- ▶ Parking barrier control
- ▶ Industrial control systems
- ▶ Rising bollards
- ▶ Rising kerbs
- ▶ Motorised gates and doors
- ▶ High-speed rapid roll industrial doors



PD239



DU100
Diagnostic Unit

3-Series Dual Channel Loop Detectors

Technical Details

Face-plate LED Indicators:

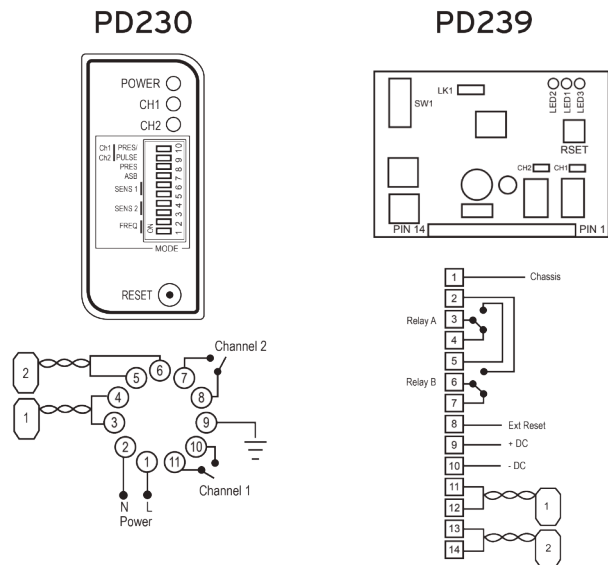
Single power LED plus individual channel LED's:

1. Tuning - on (flashed) or flashes alternatively in A/B logic mode
2. Undetect - off
3. Detect - on steady
4. Fault - on with short pulse

(manual reset required to restore)

Operating Modes:

1. Presence (CH1) or Pulse (CH1)
2. Presence (CH2) or Pulse (CH2)
3. A to B (CH1) & B to A (CH2), (presence or pulse)
4. Automatic sensitivity boost off/on



Specifications

PD230	Operating temp: -40°C to +80°C (circuit sealed against condensation)
Self-tuning range: 20-1000µH	Material: High heat ABS blend
Sensitivity: 4-step selectable per channel: High: 0.02% ΔL/L; Medium High: 0.05% ΔL/L; Medium Low: 0.1% ΔL/L; Low: 0.5% ΔL/L	Dimensions (mm): 76 x 40 x 78
Frequency: 4-step adjustable, 20-70kHz (frequency determined by loop geometry)	Mounting: Shelf or DIN rail socket
Output relays: 1 output relay per channel (fail-safe) Fail secure (factory option)	Connector: Single rear-mount 11-pin submagnal (86CP11)
ASB: Switch selectable automatic sensitivity boost	Option: 1 metre flying lead
Pulse O/P duration: Approx. 150ms (factory option 250ms)	PD239
Presence time: Selectable: limited or permanent Limited: presence 1 hour for 3% ΔL/L	As PD230 except for:
Protection: Loop isolation transformer, zener diode clamping on loop inputs and gas discharge tube protection	Self-tuning range: 20-1500µH
Power reqt.: 120V AC +/- 15% 48-60Hz (PD231) 230V AC +/- 15% 48-60Hz (PD232) 12-24V AC/DC +/- 15% (PD234) Current: 1.5VA max @ 230V	Pulse O/P duration: Approx. 150ms
Output relays: 5A @ 230V AC; N/O contact per channel (fail-safe)	Presence time: 1 hour for 3% ΔL/L permanent presence option
	Power reqt.: 24V AC/DC +/- 15% Current: 1.1VA max @ 24V DC
	Output relay: 1A @ 230V AC; change-over contacts
	Dimensions (mm): 105 x 68
	Mounting: Panel or plug-in
	Connector: Molex 14-pin female
	Option: Flying lead

Ordering Information

PD231: Dual channel, 110V AC	PD239: Card based dual channel, 24V DC
PD232: Dual channel, 230V AC	DU100: Detector diagnostic unit
PD234: Dual channel, 12-24 V AC/DC	