



## TD230 DUAL CHANNEL DETECTOR

The innovative TD236 series of single channel inductive loop vehicle detectors are used to detect vehicle presence by means of an inductive loop buried under the road and have all the features and benefits found on much larger modules. No longer is it necessary to make compromises when selecting a detector for Traffic control, counting or traffic analysis - these robust microprocessor-based units are suitable for them all. Available in standard & custom variations these detectors can cater to your every system requirement.

### APPLICATIONS

- Traffic Control Applications
- Vehicle Counting
- Tolling Equipment
- Direction Logic (AB Logic)

### SPECIFIC FEATURES

#### Compact Size

Miniature housing that saves in newer compact equipment designs. The lightweight design makes it possible to plug the unit into a DIN rail compatible socket.

#### Flexibility of Set-up

A front panel switch provides many user selected functions. Channel multiplexing eliminates crosstalk interference between the two loops connected to this detector, regardless of the proximity of the loops to each other.

#### Selectable Presence

The output of the presence relay can be selected to maintain an output for an extended period, or defined presence output times.

## Visual Fault Monitor

A fault indication is provided in the event of the loop input becoming faulty, or alternatively if the loop is out of the operational range. This feature provides assistance in localising the fault in the event of a maintenance call-out.

## Diagnostic Capabilities

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

## AB Logic

Internal selection of the AB logic option will allow the configuration of the detector in direction logic mode. In this mode, the output relays give separate outputs depending on vehicle direction. These AB logic mode is configurable and can provide either pulse or presence outputs.

## TECHNICAL DATA

### Self-tuning Range

20 $\mu$ H to 1500 $\mu$ H

### Sensitivity

Four step adjustable on faceplate:  
Ranging from 0.02% L/L to 0.5% L/L

### Frequency

Four step adjustable on the front faceplate:  
24-80 kHz (Frequency determined by loop geometry)

### Presence Time

Four step adjustable on the front faceplate: - 1 second, 4 minutes, 40 minutes, no fixed time out (limited presence) No fixed time out dependent on inductance change - 1 hour for 3% L/L)

### Relay Outputs

Or pulse output, with a pulse duration of 150ms (250ms pulse duration available on request)

### Relay Mode

Four step adjustable on faceplate: - 0, 10, 20, 30 seconds

### AB Logic

Selectable presence or pulse output, A to B (CH1) & B to A (CH2), for forward and reverse vehicle directions.

### Drift Compensation

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

### Protection

Loop isolation transformer, zener diode clamping on loop inputs and gas discharge tube protection.

## Power Requirements

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

## Operating Temp Range

-40°C to +70°C

## Dimensions

78mm (high) 41mm (wide) x 80mm (deep)

## Connector

11 pin submagnal male connector (JEDEC B11-88)  
– rear mount

## Mounting Position

Shelf or DIN-rail socket

## ORDERING INFORMATION

**306FT0004\_01**

TD136 Enhanced English 230V AC

**306FT0008\_01**

TD234 Nortech English 12-24V AC/DC

