



## TD130 SINGLE CHANNEL DETECTOR

The innovative TD136 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
- Tolling Equipment
- Traffic Analysis

### SPECIFIC FEATURES

#### Diagnostic Capabilities

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

#### Selectable Presence Time

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

#### Loop Isolation Protection

The loop is isolated and provides protection against lightning and transient damage and allows for operation with single point to ground sensor loops. Added filtering reduces interference from external noise.

## **Loop Frequency Indication**

The detector indicates its operating frequency on start-up by flashing the operating frequency count on the green channel LED, with each flash representing 10kHz. This enables an installer to minimize interference between adjacent loops / detectors by changing the frequency settings.

## **Environmental Analyser**

Continuous monitoring of external parameters ensures reliable product performance and operations under all environmental and power supply conditions.

## **Delay on Detect**

Provides a turn-on delay, thus allowing selective detection which is often useful for screening out unwanted inputs.

## **Fault Outputs**

A visual and relay based fault output provides immediate notice regarding a detector fault, resulting in less down-time and easier fault diagnostics.

# **TECHNICAL DATA**

## **Self-tuning Range**

20µH to 1500µH

## **Sensitivity**

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

## **Frequency**

Four step adjustable on faceplate: 12-85kHz (Frequency determined by loop geometry). Permanent or limited selectable

## **Presence Time**

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

## **Output Configuration**

I2 output relays, with one dedicated presence relay and one dedicated fault relay:  
Relay 1 = Presence output (Fail-Safe)  
Relay 2 = Fault output (Fail-Safe)

## **Presence Time**

Four step adjustable on faceplate: - 1 second, 4 minutes, 40 minutes, no fixed time out (No fixed timeout dependant on inductance change. Approximately 1 hour for 3% L/L)

## **Delay Time**

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

## **Indications**

The following faceplate indications are provided: Red LED – Power and Diagnostic Green LED – Channel indicator 12-24V  $\pm$ 10% ( AC/DC )

<b>Protection</b>	Loop isolation transformer, zener diode clamping on loop inputs and gas discharge tube protection.
<b>Power Requirements</b>	120V AC ±10% OR 230V AC ±10% OR 12-24V AC/DC ±10%
<b>Output Relays (Rating and Type)</b>	Presence Relay - 5A @ 230V AC Change-over contact (Fail-Safe) Fault Relay - 5A @ 230V AC Change-over contact (Fail-Safe)
<b>Operating Temp Range</b>	-40°C to +70°C (Circuit sealed against condensation)
<b>Housing Material</b>	ABS blend
<b>Dimensions</b>	78mm (high) 41mm (wide) x 80mm (deep)
<b>Mounting Position</b>	Shelf or DIN-rail socket
<b>Connector</b>	11-pin submagnal (JEDEC B11-88)

## ORDERING INFORMATION

<b>305FT0001_01</b>	TD136 Enhanced English 230V AC
<b>305FT0004_01</b>	TD136 Enhanced English 120V AC
<b>305FT0010_01</b>	TD136 NORTECH English 12-24V AC/DC