



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 it's 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

20 μ H to 1500 μ H

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% Δ L/L per minute

Output Configuration

12 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)

Protection

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

Power Requirements

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

**Output Relays
(Rating and Type)**

Presence Relay - 5A @ 230V AC
Change-over contact (Fail-Safe)
Fault Relay - 5A @ 230V AC
Change-over contact (Fail-Safe)

**Operating Temp
Range**

-40°C to +70°C (Circuit sealed against condensation)

Housing Material

ABS blend

Dimensions

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

Mounting Position

Shelf or DIN-rail socket

Connector

11-pin submagnal (JEDEC B11-88)

ORDERING INFORMATION**305FT0001_01**

TD136 Enhanced English 230V AC

305FT0004_01

TD136 Enhanced English 120V AC

305FT0010_01

TD136 NORTECH English 12-24V AC/DC