4 Channel Eurocard format Detector

TD424N

The TD424N is a high performance, 4 channel, NEMA format, microprocessor based vehicle detector.

This purpose designed traffic detector has been developed for general-purpose vehicle monitoring and counting in motorways applications.

The TD424N employs the latest SMT construction for increased reliability and low component count. This model complies with Australian Standards and is approved by the RTA and Vic Roads for use in SCATS applications

PART NUMBERS

878FT0020	TD424N Nortech (Relay)	12-24V DC
878FT0022	TD424N Nortech (Opto)	12-24V DC

FEATURES

Optimised response times:

Response times are optimised to facilitate the collection of accurate speed and length measurement data.

Optimised Sensitivity:

Sensitivity levels are adjustable for each channel. These have been carefully chosen for traffic control applications allowing adjacent lane rejection and elimination of interference.

Adjustable Presence Time:

A range of four presence times is available and, adjustable for each channel. This facilitates operation in passage mode, limited presence or for queue detection.

Mode Selection:

The TD424N can operate either as a Presence Detector or a Passage detector

Loop Fault Monitor:

The TD424N provides faceplate fault output indications on an individual channel basis.

Sequential Polling:

Scanning techniques are employed to positively eliminate crosstalk between loops connected to the same detector module. Similarly a loop synchronisation feature prevents crosstalk between channels of different detectors.

Optional features :

These optional features are factory enabled depending on requirements:

“Anti - lock” for positive change rejection,

“Auto-retune” to protect against faulty loops in multiple loop configurations.

APPLICATIONS

- Vehicle actuated traffic control
- Traffic counting
- Toll applications
- Incident detection

TECHNICAL DETAILS

TD424N

Self tuning range:	20-1000µH
Sensitivity:	Seven step adjustable on faceplate: Step 7: 0.02% ΔL/L Step 5 -6 : 0.05 / 0.1%Δ L/L Step 2-4 : 0.2 / 0.3 / 0.4 % ΔL/L Step 1 : 0.5% ΔL/L
Frequency:	Four step adjustable on face plate, 20- 140kHz (frequency determined by loop geometry)
Presence time:	Fixed Presence time: 1.5 seconds in passage mode or 8 minutes (Limited by %ΔL/L)
Response Times:	Turn-on 52 ms ±3.5ms Turn-off 52 ms ± 3.5ms Recovery ± 75ms
Operating modes:	Two position Mode selector on face-plate 1. Passage mode 2. Presence mode
Indications:	The following face-plate indications are provided per channel: 1 red - detect 1 red - fault
Protection:	Loop isolation transformers, zener diode clamping on loop inputs and gas discharge tube protection
Power requirements:	12 - 40V DC 100 m.a. max input current
Relay Outputs:	1 A @ 230 V AC Single change over contact per channel
Opto Outputs:	Optional model with opto-isolated solid state outputs

Operating temperature range: -40ºC to +80ºC

Humidity: up to 95% without condensation

Mechanical detail:

NEMA card Dimensions: 175mm x 114mm

Faceplate: 25mm (wide) – 1 inch

Connector: 2 x 22 terminal,
0,156 - inch contact spacing.
Cinch Jones card edge connector,
50-44A - 30M or equivalent.)

NORTECH TRAFFIC