



4 Channel Eurocard format Detector

TD624ES

The TD624 is a high performance, 4 channel, Eurocard format, microprocessor based vehicle detector.

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

The TD624ES employs the latest SMT construction for increased reliability and low component count. This model complies with Australian Standards and Road Traffic Authority approvals.

PART NUMBER

878FT0070 TD624ES Nortech 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.

Loop Fault Monitor:

The TD624ES provides local and remote 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.

Serial Communication:

The TD624ES has a serial link on the rear connector for communication with a host device. Each card is programmed with a unique address for multi-drop communication.

Optional features :

These optional features are enabled on a PCB mounted DIL swich. "Anti - lock" for positive change rejection, "Auto-retune" to protect against faulty loops in multiple loop configurations and a "power - save" mode that disables front-panel indications.

APPLICATIONS

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

TECHNICAL DETAILS

Self tuning range:	20-1000 μ H
Sensitivity:	Four step adjustable on face-plate: High: 0.02% Δ L/L Medium High: 0.06% Δ L/L Medium Low: 0.12% Δ L/L Low: 0.24% Δ L/L
Frequency:	Four step adjustable on face plate, 20- 140kHz (frequency determined by loop geometry)
Output Configuration	One presence output per channel
Presence time:	Four step adjustable on face-plate: 1.5 seconds 4 minutes 35 minutes (Limited by % Δ L/L)
Response Times:	Turn-on 40 ms \pm 2.4ms Turn-off 45ms \pm 2.4ms Recovery \pm 80ms
Indications:	The following face-plate indications are provided per channel: 1 red - detect 1 red - fault
PCB switch selection:	1. Card address for serial communication 2. Anti - locking enable 3. Auto - retune enable 4. Power save
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
Fault Outputs:	Common open collector operates under conditions of a Loop short / open circuit
Detect Outputs:	Individual open collector, turns off for vehicle presence.
Solid State Outputs :	Isolated current sink (reverse voltage protection - 50 m.a. @ 50V DC

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Serial Communication:

Data Rate - 9600 bps
Data Bits - 8
Start Bits - 1
Stop Bits - 1
Parity - none
Format - binary
Level - TTL
Handshaking - none

Operating : temperature range	-40°C to +80°C
Humidity:	up to 95% without condensation

Mechanical detail:

Eurocard Dimensions:	160mm x 100mm
Faceplate:	25mm (wide)
Connector:	2 x 32 row pin card edge connector (DIN 41612 type B)



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