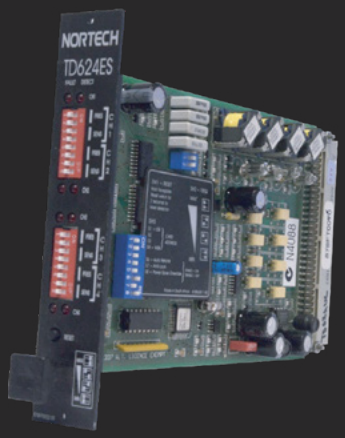
NORTECH
TRAFFIC



TD624ES
HIGH PERFORMANCE DETECTOR

Developed for general purpose vehicle monitoring and counting in motorway applications, the TD624 4 channel inductive loop detector employs the latest SMT construction for increased reliability and low component count. The optimised response times facilitate the collection of accurate speed and length measurement data and the optimised sensitivity levels allow adjacent lane rejection and elimination of interference in a traffic control application. It complies with TR0100/TR2512 UK DoT for motorway use.

APPLICATIONS

- Speed monitoring in motorway application
- Determining vehicle headway
- Calculation of lane occupancy
- Accurate high-speed vehicle speed measurement

SPECIFIC FEATURES

Optimised Response Time

Response times are optimized to facilitate the collection of accurate speed and length measurements.

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 mode or for queue detection.
Loop Fault Monitor	The TD624ES provides local and remote fault output indications on an individual channel basis, as required.
Sequential Polling	Scanning techniques are employed to positively eliminate crosstalk between loops connected to the same detector module.
Serial Communication	The TD624ES is able to communicate various settings and information (e.g. tuned frequency value, sensitivity settings etc) via a serial link. The serial link operates at TTL levels.

TECHNICAL DATA

Self-tuning Range	20 - 1000µH
Sensitivity	Four step adjustable on faceplate: High – 0.02% ΔL/L to Low – 0.24% ΔL/L
Frequency	Four step selectable on PCB: 10-140 kHz (Frequency dependent on loop geometry)
Output Configuration	One opto-isolated presence output per channel
Presence Time	Four step adjustable on faceplate 3.5 seconds 4 minutes 40 minutes Limited by % ΔL/L Change
Static Response Times	Turn on 61ms ± 3.0ms (typical) Turn off 61ms ± 3.0ms (typical)
Fault Outputs	One opto-isolated fault output per channel indicating loop short/open circuit conditions OR on any channel
Indications	The following indications are provided: 2 x LED per channel • 1 x Red – Detect • 1 x Red – Fault

Protection	Loop isolation transformers, zener diode clamping on loop inputs and gas discharge tube protection.
Power Requirements	24V DC ±20%, requirement 1.8VA (max) @ 24V DC
Output Opto-Couplers	50mA @ 30V DC (Max)
Operating Temp Range	-40°C to +80°C (Circuit conformal coated)
Mechanical Details	Standard Eurocard Format
Dimensions	160 mm (l) x 100 mm (h)
Faceplate	25 mm (w)
Connector	64 way DIN 41612 Type B connector

ORDERING INFORMATION

878FT0070	TD624ES TRAFFIC DETECTOR 24V
878FT0078	TD624ES ENHANCED TRAFFIC DETECTOR (24V DC)

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