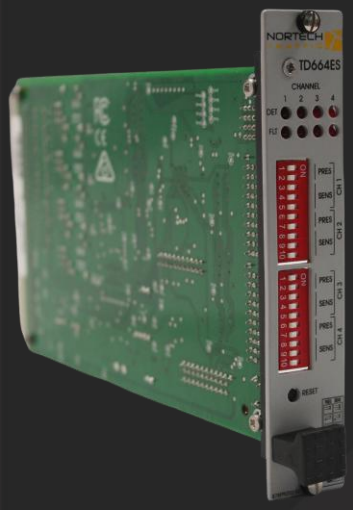
NORTECH TRAFFIC

878DS0202_00



TD664ES

HIGH PERFORMANCE DETECTOR

The TD664 4 channel inductive loop vehicle detector combines functionality and value offering greater sensitivity and higher performance. The Automatic Frequency Selection (AFS) makes set-up a breeze as the detector automatically chooses the best frequency setting on start-up, evaluating 21 possible frequency shifts. The TD664ES inductive vehicle detector is fully electronically tuneable and can be configured via the serial interface, allowing for remote configuration and calibration.

The variable response time enhances the accuracy of speed and length measurements of vehicles. The TD664ES Eurocard detector complies with TR0100/TR2512 UK Highways Agency pin configuration for motorway use.

APPLICATIONS

- Speed Monitoring in Motorway Applications.
- Incident Monitoring.
- Tunnel Monitoring.
- Tolling Equipment.

SPECIFIC FEATURES

Automatic Frequency Selection

Electronic tuning of channels allows each channel to be tuned to a specified frequency band, or the detector is capable of analysing multiple operating parameters and selecting the ideal operating frequency automatically.

Optimised Sensitivity	8 Sensitivity levels are available for each channel (Including channel OFF). These have been carefully chosen for traffic control applications, allowing adjacent lane rejection and elimination of interference.
Adjustable Presence Time	4 Presence times are available for each channel. This facilitates operation in passage mode, limited presence or for queue detection.
Variable Response Time	Response time can be improved by lowering the sensitivity of all channels.
Loop Fault Monitor	The TD664ES provides local and remote fault output indications on an individual channel basis, as well as calibration feedback.
Sequential Polling	Scanning techniques are employed to positively eliminate crosstalk between loops connected to the same detector module.
Serial Communication	The TD664ES 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	Eight step adjustable on faceplate with option to turn channel. OFF: High – 0.01% ΔL/L to Low – 0.64% ΔL/L.
Frequency	Step selectable in 10kHz bands on PCB: 40 - 120kHz (Frequency dependent on connected loop and loops can tune outside of this range).
Detect Outputs	One opto-isolated presence output per channel indicating vehicle presence.
Presence Time	Four step adjustable on faceplate: - 3.5 seconds. - 4 minutes. - 40 minutes. - Permanent presence (Limited by % ΔL/L Change).
Static Response Times	Turn on/off time 35.7ms ± 2.3ms (typical).
Variable Response Times	Can be reduced to turn on/off time of 11.9ms ± 0.7ms with all channels on Low Sensitivity.
Fault Outputs	One opto-isolated fault output per channel indicating loop short/open circuit conditions. One master opto-isolated fault output indicating a fault on any of the 4 channels.

Indications	The following indications are provided on the faceplate. 2 x LED per channel: - 1 x Red – Detect. - 1 x Red – Fault.
Protection	Loop isolation transformers, TVS diode clamping on loop inputs and gas discharge tube protection.
Power Requirements	10 - 60V_{DC}.
Output Opto-Couplers	50mA @ 55V_{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) x 25mm (w).
Connector	64 way DIN 41612 Type B connector.
Additional Features	Automatic Sensitivity Boost, Automatic Frequency Selection, Anti-Lock-Up, Skip/Dead mode for disabled channels, Variable Response Time.

ORDERING INFORMATION

878FT0202	TD664ES 4CH DET OPTO OUTPUTS