



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 - 1000 μ H

Sensitivity

Eight step adjustable on faceplate with option to turn channel OFF: High – 0.01% Δ L/L to Low – 0.64% Δ L/L

Frequency

Step selectable in 10kHz bands on PCB: 40 - 120kHz (Frequency dependent on connected loop and loops can tune outside of this range)

Output Configuration

One opto-isolated presence output per channel

Presence Time

Four step adjustable on faceplate:
3.5 seconds
4 minutes
40 minutes
Permanent presence (Limited by % Δ L/L Change)

Static Response Times

Turn on/off time 35.7ms \pm 2.3ms (typical)

Variable Response Times

Can be reduced to turn on/off time of 11.9ms \pm 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:

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