

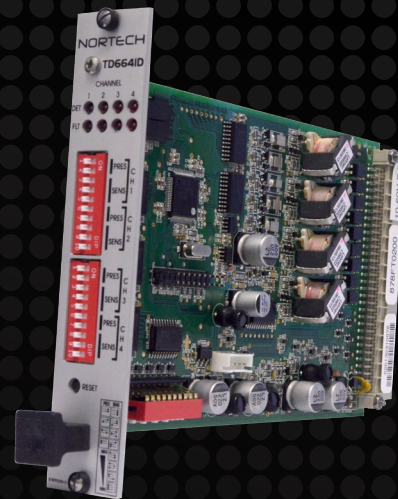


# TD664ID HIGH PERFORMANCE DETECTOR

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. Features incorporated on this model make it an invaluable component in any 3M AVC system. The high-end sampling algorithm provides extremely high levels of sensitivity, enhancing the 3M AVC axle loop capability. The TD664ID 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 the vehicle. The TD664ID Eurocard detector complies with TR0100/TR2512 UK Highways Agency pin configuration for motorway use.

## APPLICATIONS

- Speed monitoring in motorway application
- Incident monitoring
- Tolling Equipment
- Tunnel monitoring
- Intelligent vehicle detection
- Vehicle classification
- Axle detection



## SPECIFIC FEATURES

<b>Automatic Frequency Selection</b>	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.
<b>Optimised Sensitivity</b>	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.
<b>Adjustable Presence Time</b>	4 Presence times are available for each channel. This facilitates operation in passage mode, limited presence or for queue detection.
<b>Variable Response Time</b>	Response time can be improved by lowering the sensitivity of all channels
<b>Loop Fault Monitor</b>	The TD664ID provides local and remote fault output indications on an individual channel basis, as well as calibration feedback.
<b>Sequential Polling</b>	Scanning techniques are employed to positively eliminate crosstalk between loops connected to the same detector module.



## TECHNICAL DATA

<b>Self Tuning Range:</b>	20 - 1000 $\mu$ H
<b>Sensitivity</b>	Eight step adjustable on faceplate with option to turn channel OFF: High – 0.01% $\Delta$ L/L to Low – 0.64% $\Delta$ L/L
<b>Frequency</b>	Step selectable in 10kHz bands on PCB: 40 - 120kHz (Frequency dependent on connected loop and loops can tune outside of this range)
<b>Detect Outputs</b>	One opto-isolated presence output per channel indicating vehicle presence
<b>Presence Time</b>	Four step adjustable on faceplate: 3.5 seconds 4 minutes 40 minutes Permanent presence (Limited by % $\Delta$ L/L Change)
<b>Static Response Times</b>	Turn on/off time 35.7ms $\pm$ 2.3ms (typical)
<b>Variable Response Times</b>	Can be reduced to turn on/off time of 11.9ms $\pm$ 0.7ms with all channels on Low Sensitivity
<b>Fault Outputs</b>	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
<b>Indications</b>	The following indications are provided on the faceplate: 2 x LED per channel • 1 x Red – Detect • 1 x Red – Fault
<b>Protection</b>	Loop isolation transformers, TVS diode clamping on loop inputs and gas discharge tube protection.
<b>Power Requirements</b>	10 - 60V DC
<b>Output Opto-Couplers</b>	50mA @ 55V DC (Max)
<b>Operating Temperature Range</b>	-40°C to +80°C (Circuit conformal coated)
<b>Mechanical Details</b>	Standard Eurocard Format
<b>Dimensions</b>	160 mm (l) x 100 mm (h) x 25mm (w)
<b>Connector</b>	64 way DIN 41612 Type B connector
<b>Additional Features</b>	Automatic Sensitivity Boost, Automatic Frequency Selection, Anti Lock-Up, Skip/Dead mode for disabled channels

## ORDERING INFORMATION

878F-T0200	TD664ID 4CH DET OPTO OUTPUTS
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