

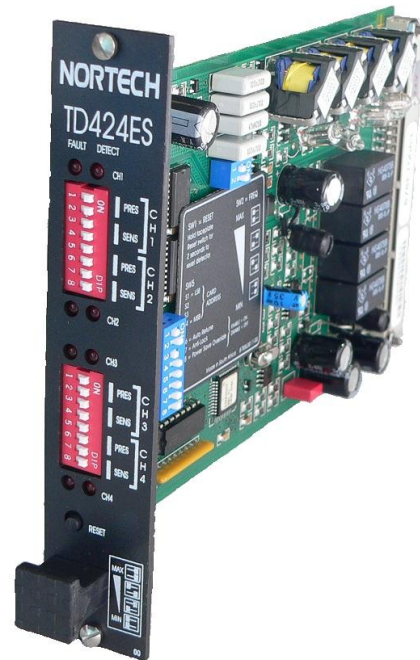
High Performance Traffic Detector

The TD424 series of 4 channel microprocessor based traffic detectors with Eurocard OR ANSI/NEMA Standard TS1, Part 15 connectors having discrete detector outputs, Logic outputs as well as having the option to have a serial link for communication to a host device.

The detector has been designed for ease of operation and parameters can be individually set for each channel. The TD424 is a Presence Detector providing a continuous output while a vehicle is present in the detection zone.

Applications

- Traffic counting
- Stopline detection
- Queue detection
- Vehicle actuated traffic control



Features of the TD424

Configuration	Four channel detector for rack mounting and powered from an external source
Front end type	Multi-channel, single multiplexed oscillator, employing sequential channel sampling
Detection method	Microprocessor controlled by monitoring loop oscillator frequency changes resulting from loop inductance variation due the presence of motor vehicles
Format	Eurocard OR NEMA size with front panel accessed 2 x 8-way DIL switches and visual indicators
Optional Auto-retune	The detector will retune following a step inductance change greater than 15% of the current value

The Idris technology is protected by one or more of the following patents:
EP0879457, USA 6345228, 6337640 and 6483443.
Further patents pending.

High Performance Traffic Detector

Self Tuning Range:	20 - 1000 μ H
Sensitivity:	Four step adjustable on faceplate: High 0.02% Δ L/L Med-High 0.05% Δ L/L Med-Low 0.1% Δ L/L Low 0.5% Δ L/L
Frequency:	Four step selectable on PCB: High, Medium-High, Medium-Low and Low Frequency dependent on loop per channel
Output Configuration:	One opto-isolated presence output per channel
Presence Time:	Four step adjustable on faceplate: 3.5 seconds 4 minutes (<i>Optional 8 minutes</i>) 40 minutes Infinity – no fixed time-out
Static Response Times:	Turn on 40mS \pm 7mS Turn off 45mS \pm 7mS
Indications:	The following indications are provided: 2 x LED per channel <ul style="list-style-type: none"> ▪ 1 x Red – Detect ▪ 1 x Red – Fault 2 x Timing Status Indicators (Red) 2 x Mode Indicators
Protection:	Loop isolation transformers, zener diode clamping on loop inputs and gas discharge tube protection.
Power Requirements:	12 V to 40 V DC 100 mA max.
Detect outputs:	Sealed relays rated at 1A @ 220V AC Single change-over contact per channel Opto-isolated rated at 50mA @ 50V DC (<i>optional</i>)
Operating Temperature Range:	-40 °C to + 85 °C (Circuit conformal coated)
Mechanical Details:	Standard Eurocard <u>OR</u> NEMA Format
Dimensions:	160 mm (l) x 100 mm (h)
Connector:	2 x 32 way DIN 41612 type C connector, <u>OR</u> Dual NEMA 22-way direct mating edge connector

Ordering Information

878FT0021	TD424N, NEMA with relay outputs, 24V DC
878FT0037	TD424N, NEMA with opto outputs, 24V DC
878FT0046	TD424E, Eurocard 24V DC
878FT0061	TD424E4, Eurocard with relay outputs, 24V DC
878FT0063	TD424ES, Eurocard with Serial output, 24V DC