

# TDD1-MW30

## Doppler-Radar Traffic Detector with 30 m (100 ft.) Range



The TDD1-MW traffic detector uses Doppler radar technology for detecting vehicles moving through its field of view at short to medium distances.

### Typical Applications

The ADEC TDD1-MW30 has been developed for a range of applications that require robust and reliable detection:

- Green-phase request or extension at traffic lights, with possibility to discriminate by vehicle driving direction
- Speed-dependent detection of vehicles
- Door sensor: As detector for auto-operation of doors
- Speed measurement acquisition for driver information systems
- Simple queue detection

### Working Principle

The TDD1-MW30 detects moving objects by detecting the frequency shift of the reflected microwave vs. the transmitted waves.

Application-dependent features can be configured easily and effortlessly using the IR remote control (extra accessory). These functions include:

- Direction-discrimination (approaching / receding / both)
- Detection range (15 m / 30 m, 50 ft. / 100 ft.)
- Minimum speed threshold (4 km/h / 8 km/h, 2.5 mph / 5 mph)
- Auto-timer output activation (off / 90 s / 150 s)
- Feedback LED on front of detector (on / off)

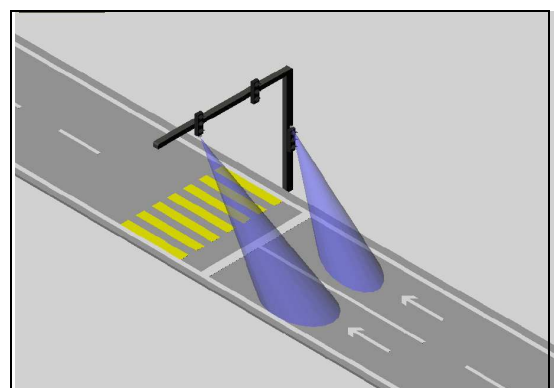
### Mounting

The recommended mounting location is on a pole at the side of the road, approximately 1 to 5 m (3 to 16 ft.) above ground.

### Features

- **Easy Integration**  
Using SPDT relay output or using serial RS 485 for acquisition of speed and occupancy
- **Extended Supply Voltage Range**  
5 VDC - 60 VDC / 24 VAC
- **Robust, Lasting Design**  
Poly-carbon enclosure with weather protection hood using stainless steel V4A
- **Large Mounting Range**  
Mounting height 1 - 5 meters (3 - 16 ft)
- **Easy Installation**  
Mounting bracket with three holes for easy mounting on poles or gantries
- **Easy & Effortless Configuration**  
Using IR remote control (extra accessory)
- **Large operating temperature range of  $-40^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$  to  $160^{\circ}\text{F}$ )**  
Peak performance in all environmental conditions

### Detection Zone

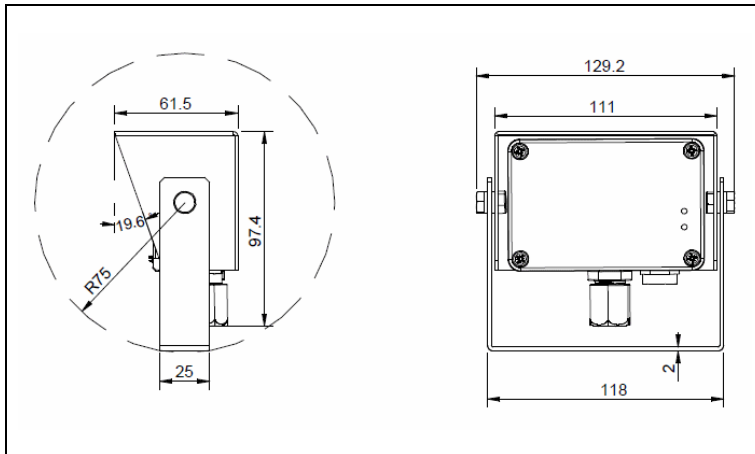


## Technical Specifications

Electrical	
Supply Voltage	5 ... 60 VDC / 24 VAC
Power Consumption	app. 50 mA @ 12 VDC
Output (Data Transfer)	RS 485, 9600 Bps, 8/E/1
Output / Switch*	Relay, SPDT / 300 VAC / 2 A / 60W
Function indication	Tri-color LED on front of detector
Turn-on time	1 second after power on
Mechanical	
Dimensions	see drawing
Case Material	Polycarbonate, dark gray
Weather protection	Stainless steel, V4A
Weight	app. 700 g (25 oz) incl. bracket
Detection	
Doppler Radar	K-Band 24.05 ... 24.25 GHz
Detection Range	30 m nominal
Low speed threshold	Selectable, 4 / 8 km/h (2.5 / 5 mph)
Environmental	
Operating Temperature	-40°C to +70°C (- 40° to +158 °F)
Humidity	95 % RH max. (non-condensing)
Sealing	IP 64 splash proof

\*) the maximum voltage on the output must not exceed the supply voltage!

## Mechanical Dimensions



### Important:

Data is based on samples and believed to be representative.

Design and specification changes reserved without prior notice.

For more specific information on the products, their installation and application please refer to the installation manual or contact the manufacturer.

## Accessories

### IR Remote Control

To customize the settings of the detector, an infrared remote control is required. The remote control is an extra accessory and has to be ordered separately.

TDD1-IRF (Order Number: 12510)

### Mounting Accessories

Pole mount adapter for mounting the detector on a round pole. The pole mount adapter is an extra accessory and has to be ordered separately as necessary.

TDC-PMA (Order Number: 14101)

### Interface RS 485 & Software

For the communication between detectors and a PC during commissioning and maintenance an interface module in combination with the dedicated software is necessary. The interface module and software has to be ordered separately.

USB IF 485 (Order Number: 12501)

## Model Overview

- TDD1-MW30