

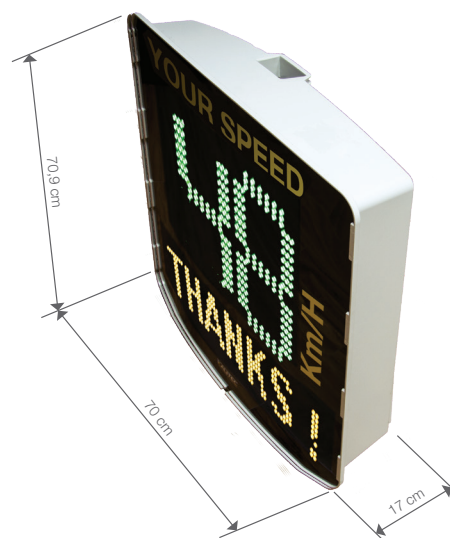
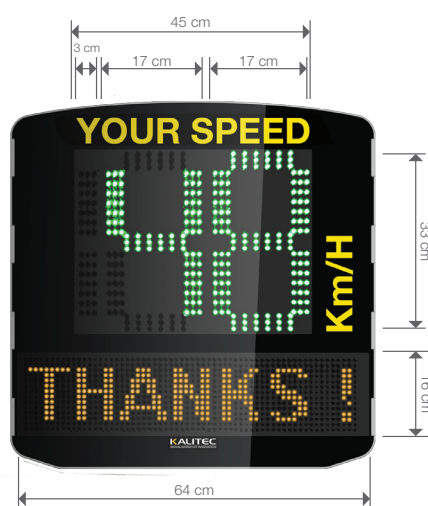
# KALITEC'S RADAR SPEED DISPLAY SIGN

## TECHNICAL SPECIFICATIONS



DATA SHEET  
**KALITEC**  
PERFORMANCE - DESIGN - INNOVATION

### DIMENSIONS



### WHY CHOOSE OUR RADAR SPEED DISPLAY...

Kalitec's Radar Speed Display is the best device of its category and effectively helps reduce speeds.

- **Improvement of 9.5 kph (19.2%), which translates to respectively 60% and 40% less lethal threat in vehicle-pedestrian and vehicle-cyclist crashes\***
- Display custom messages on separate text matrix
- Three (3) colours speed display, 3 LEDs wide
- Up to 300 m detection range with exceptional precision (+/-1%)
- Speeds are displayed faster (1 s) and longer (1.5 s)
- Easy to program, analysis and stats data transfer of two-way traffic
- Data collection saving capacity of more than a million vehicles
- Aesthetic, light, durable and also water-, snow- and dust-proof, anti-theft casing
- Assembled in ISO 9001 certified plant
- Best warranty with tree (3) years on parts and labor (Premium model).
- Three (3) weeks max delivery time.

\*McGill University study with Kalitec's Radar Speed Sign, 2018

# GENERAL



## DESCRIPTION

Kalitec's Radar Speed Display has an inner Doppler type radar that reads speed of vehicles, which is displayed on its high output, tricolour LED matrix. Colours displayed according to speed readings : green or yellow for under or reaching speed limit, red for over speed limit, and flashing for critical speed.

Accompanying messages can also be displayed on the text matrix, with up to five (5) different ones that follow speed parameters.

Device collects and saves traffic data like time, date and speed of vehicles. These can be read and put into graphs with the included Evograph software.

## TECHNICAL SPECIFICATIONS



### POWER

- 100 W solar kit, includes two (2) AGM type batteries (40 Ah total), solar charger, 100 W monocrystalline solar panel, cabling, installation brackets and hardware
- Permanent electrical power grid hook-up with 100 - 240 VAC power supply
- Public lighting grid 100 - 240 VAC, includes batteries and charger for use in daytime when lighting is turned off
- 12 VDC battery (choice of either AGM or LiFePO<sub>4</sub> type batteries, must be recharged after use)
- Photocell for automatic light intensity adjustment according to ambient light
- Operating temperature : -40 to +85°C (-40 to +185°F)



### RADAR

#### RADAR TYPE

Doppler

#### TRANSMISSION FREQUENCY

24.125 GHz

#### EFFECTIVE RADIATED POWER (ERP)

20 dBm

#### RADAR BEAM ANGLE

33 x 33°

#### PRECISION

+/- 1%

#### ADJUSTABLE RADAR RANGE

10 to 300 m (33 to 985 ft)



## DISPLAY

- Units in either kilometers per hour (kph) or miles per hour (mph)
- Display refreshes every second (configurable)
- LEDs angle : 55°
  - Provides excellent visibility, close or far, even in multiple lane roads
  - Twice (2x) the visibility at equal power
  - Much less light pollution for nearby citizens



## COLOURS

Red / Amber / Green (set according to recorded speed)

## DIGITS

3 digits, 33 cm (13 in) high of high output Osram LEDs in 3 rows, with photocell for automatic intensity adjustment according to ambient light

## TEXT DISPLAY MATRIX

1 line of 6 digits, 14 cm (5.5 in) high

2 lines 10 digits, 7 cm (2.75 in) high

Default display font : “Terminal”

(Fonts and variants from MS Office,  
number of digits varies according to specific font used)



## CASING

- Weatherproof casing made of ABS and polycarbonate (PC) composite materials
- Polycarbonate (PC) front that resists impacts, corrosion and UV rays
- IP 65 rated
- Weight : 10 kg (22 lbs), without batteries



## COMMUNICATION

### WIRED

USB

### WIRELESS

Bluetooth access by laptop PC or tablet (Android or Windows)

GPRS : access by cellular communication through web-based platform



## PARAMETERS AND MESSAGE CHANGES

## THRESHOLDS SETTING WITH PRESETS DIAL

For easy start up, rotate dial to desired speed limit. This will select a preset with defined best parameters like display colours, flashing and common messages on text matrix.



## EVOCOM SOFTWARE CONFIGURATION

## THRESHOLDS SETTING

Advanced parameters can be changed with Evocom free software

- Maximum display speed
- Digits colour changes
- Changing messages, up to five (5) different ones
- Flash triggering, flashing digits at higher speeds
- Display threshold to prevent racing or records behaviours
- Optional relay triggering (.1 - 10 s), for second device i.e. flashing light, beacon, camera, etc.

## SCHEDULE

Display following defined schedule

## MESSAGES

Up to five (5) messages

## STEALTH / SPY MODE

Device works in stealth/spy mode without showing any speeds on the display



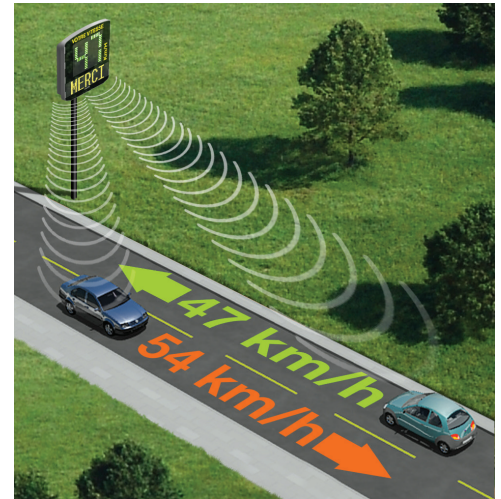
## STATS, DATA COLLECTION AND ANALYSIS

Two-way traffic data collection and saving of multiple elements, i.e. number of vehicles, average and maximum speeds and times of transit (capacity of more than 1 million vehicles).

Stealth / spy mode which makes device collect data without displaying any speeds.

Stats data collection download via wired or Bluetooth wireless connection, daily in GPRS mode.

Speed readings precision of +/- 1 kph; optional time precision to the second in both ways (incoming & outgoing).



### RAPPORTS STATISTIQUES ET GRAPHIQUES VIA LOGICIEL INCLUS

#### REPORT FORMATS

Reports can be exported to CSV, XLS and PDF formats

#### GRAPHS CAN BE DIRECTLY SAVED IN PDF FORMAT

1. Average speeds based on time
2. Maximum speeds based on time
3. Number of vehicles based on time
4. Speeds distribution based on time
5. Speeds percentiles

#### STATS

Two-way traffic data collection



## CERTIFICATION

Assembled in ISO 9001 certified plant