Specifications

**RF specifications**
- Frequency: 24.15 to 24.25 GHz
- Output power: 1mW (PIRE<20dBm)
- Antenna beamwidth: Horiz: 6° / Verti: 9°
- Compliant with: EN300440

**Performance**
- Speed range: 1.5 km/h to 100 km/h
- Turn on time: 200ms
- Measurement visible: on LCD screen
- Resolution: 0.01 km/h
- Accuracy (1): ±0.2 km/h
- Detection distance (2): > 30m

**DC specifications**
- Supply voltage: 12V (battery operated)
- Battery: Sealed and maintenance free
- Autonomy: > 48h
- Battery and charger included in pack

**Mechanical specifications**
- Box type: Pelicase
- Weight: 2500gr
- Protection classification: IP65

**Environmental conditions**
- Operating temperature: -10°C..+50°C
- Storing temperature: -20°C..+60°C

**Low speed measuring sensor**
- Doppler radar based sensor
- LCD display
- Battery powered (autonomy > 48h)
- Adjustable tripod (63 to 170 cm)

**Serial communication bus (optional)**
- RS232

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(1) For a viewing angle of 0°
(2) See diagram 2 "Sensitivity"
Velocity measurement based on Doppler

\[
\text{Velocity} = \frac{F_{\text{Doppler}} \lambda}{2 \cos \theta}
\]

if \( \theta < 10 \text{ deg.} \) error measurement is less than \( \pm 2\% \) (see Diag. 1)
if \( \theta > 45 \text{ deg.} \) accuracy is poor.

Sensitivity

- The reflectivity of a target depends on its surface, size and composition.
- Metallic surfaces are highly reflective.
- The shape of the target can degrade its detection.
- Radar waves do not cross water films and metallic sheets, but can cross some walls or plastic sheets.
- Radar waves are slightly weakened by the rain and the dirt.
- The shape of the target can influence the distance measurement.
- The thinner the antenna beamwidth is, the more sensitivity it has.

Measuring protocol

- Place the radar closer to the axis of movement of the vehicle with a minimum viewing angle.
- To improve the measurement accuracy, measure distance \( D \) (on the above diagram) and multiply it by speed displayed by the correction factor (cf. Diag. 1).
- The passage of the vehicle in front of the radar beam triggers a 2s measurement.
- The radar will display a speed measurement on the screen if the detected speed is sufficiently stable during 2s.
- Press the keyboard to start a new measurement cycle.
- The screen will not switch on if battery needs charging.
- The radar will power off automatically once suitcase is closed.

DISCLAIMER:
Different technical specifications are possible upon request. AMG reserves the right to make modifications to the design and characteristic of the product at any times and without prior notice.