

viafalcon HIGHWAY



Microprocessor controlled radar detector of a new generation. FSK/FMCW technology enables viafalcon HIGHWAY to measure vehicle speed, length for classification and net time gap of moved objects as well as distance range and angle between viafalcon HIGHWAY and detected object.

This additional information allows a viafalcon HIGHWAY mounted in an overhead position to measure also the vehicle height for a most accurate vehicle classification.

Other applications as speed measuring in a selected distance range or controlling of a VMS if a vehicle is in an adjustable speed and distance range are possible.

viafalcon SE



Microprocessor controlled radar detector for speed enforcement (OIML-R 91). The multi target detector has the ability to detect and process up to 30 targets simultaneously.

As soon as there is more than one target within the area of detection, the measurement will be rejected to receive only court-proofed measurements. Advanced DSP signal processing algorithms in connection with a narrow-angle antenna provides an accurate speed measurement.

Additional features are an internal test signal generator, redundant data processing and secured transmission protocol.

Applications:

- Traffic management systems
- Traffic data measurements
- Traffic jam warning
- Tunnel surveillance
- Traffic density and travel time calculation

Applications:

- Repressive speed measurement
- Speed enforcement with tight tolerance

Technical specification: digitalFALCON HIGHWAY

| | |
|---------------------------------|-----------------------------------|
| Sensor type | FSK-Doppler radar, planar module |
| Type of detection | Movement |
| Detected direction | uni- or bidirectional |
| Antenna | 13° x 23° (TX) / 13° x 55° (RX) |
| Transmit frequency & power | 24.15 - 24.175 GHz / 100mW (EIRP) |
| Detection distance range (cars) | 100 m |
| Detected speed range | 1 - 255 km/h |
| Power supply (nom, min, max) | 12V / 8V - 60V DC |
| Current consumption @ 12V DC | 150 mA |
| Signal outputs | 2 relays |
| Data outputs | Yes |
| Interface (Standard) | RS232 / RS422 / RS485 |
| Interface (Optional) | - |
| Data protocol, format | ASCII, 8N1 |
| Data transmission rate | 115200 Baud |
| Operation temperature range | -20° - +70° Celsius |
| Housing (H x W x D) | 120 x 120 x 90 mm |
| Housing protection class | IP 66 |
| other features | Network capability |
| Options | Fieldbus, TCP-IP |

Technical specification: digitalFALCON SE

| | |
|---------------------------------|--|
| Sensor type | multi target CW stereo-Doppler radar, planar module |
| Type of detection | Movement |
| Detected direction | uni- or bidirectional |
| Antenna | 5° x 21° Patchantenna |
| Transmit frequency & power | 24.125 GHz / 100mW (EIRP) |
| Detection distance range (cars) | maximum 300 m (0°) / typically 10 m (22°) |
| Detected speed range | 3 - 255 km/h |
| Power supply (nom, min, max) | 12V / 9V - 15V DC |
| Current consumption @ 12V DC | 450 mA |
| Signal outputs | 4 optocouplers |
| Data outputs | Yes |
| Interface (Standard) | RS232 |
| Interface (Optional) | - |
| Data protocol, format | ASCII, 8N1 with CRC 32 checksum |
| Data transmission rate | 9600 Baud or 115200 Baud |
| Operation temperature range | -20° - +60° Celsius |
| Housing (H x W x D) | 200 x 120 x 90 mm |
| Housing protection class | IP 66 |
| other features | accurate speed measurement, up to 30 targets, internal test signal generator |
| Options | - |