Dimensions PCD-1: 15,1 x 12,5 x 6,0 cm (H x W x D) **PCD-2:** 23,1 x 12,5 x 6,0 cm (H x W x D)

viafalconPCD 1 / PCD 2

The new radar detectors "viafalcon PCD-1" and "PCD-2" are designed for the use at pedestrian crossings for the detection of pedestrians passing across it. The detectors can be used to switch on warning signs or to modify the time duration of the red/green traffic light phase.

- The "**viafalcon PCD-1**" has a single forward facing detection zone, e.g. for the observations of a crossing from the pavement.
- The "**viafalcon PCD-2**" has two independent detection zones located on opposite sides, in a 180° angle, facing right (zone 1) and left (zone 2). This allows a cost effective, simultaneous observation of two crossings with one detector from a middle reservation e. g. a pedestrian island.

Advanced DSP signal processing algorithms in connection with a matched antenna configuration provides a high recognition accuracy and good suppression of interferences such as diagonal vehicle traffic or weather influence due to movements caused by rain, snow or hail.

Applications:

- Selective pedestrian on-crossing detection with suppression of by-passing vehicles and rain, snow or hail movement
- Control of warning signs and traffic lights
- On demand brightness control of street lights
- Modification of the time duration for the red/green traffic light phase

viafalcon **PCD-1**:
The single forward detection zone allows the observation of pedestrian crossings from the pavement. Warning signs can be switched on or green light phases can be extended.

viafalcon **PCD-2**:
Two independent detection zones allow the simultaneous observation of two crossings from a middle reservation (180°).

Technical specification:

viaFALCON PCD 1 / PCD 2	
Sensor type	CW-Doppler radar
Type of detection	Movement
Detected direction	Oncoming or bidirectional
Antenna pattern H/V	33°/33° (-3dB)
Transmit frequency	24.150 … 24.250 GHz
Transmit power (EIRP)	<= 20 dBm
Measuring procedure	Analysis of speed- and intensity-profiles
Number of antennas	PCD-1: one / PCD-2: two
Detection zones	PCD-1: one, facing forward / PCD-2: two, facing left and right
Detector mounting height (typ.)	2.5 … 5 m
Detection field max. length: (at height = 3.5m, declination = -30°V)	ca. 8 m x 15 m (each zone)
Measuring speed range	1 to 80 km/h
Pedestrian speed range	2.2 to 12 km/h
Supply voltage	Nom. 12 VDC (9 … 34VDC; 8 … 24VAC)
Current consumption @ 12V DC	PCD-1: max. 200mA / PCD-2: max. 300mA
Signal outputs	PCD-1: 2 relays / PCD-2: 3 relays
Data outputs	Yes
Data interface	RS232
Data protocol	ASCII
Data transmission rate, format	115200 Baud, 8N1
Operation temperature range	-40°… +70° Celsius
Housing (H x W x D)	PCD-1: 151 x 125 x 60 mm / PCD-2: 231 x 125 x 60 mm
Housing protection class	IP 66
Other features	Interval timer for cyclic relay activation, internal test signal generator.
Options	Mounting plate and pole mounting available.