

PEDESTRIAN PRESENCE SENSOR

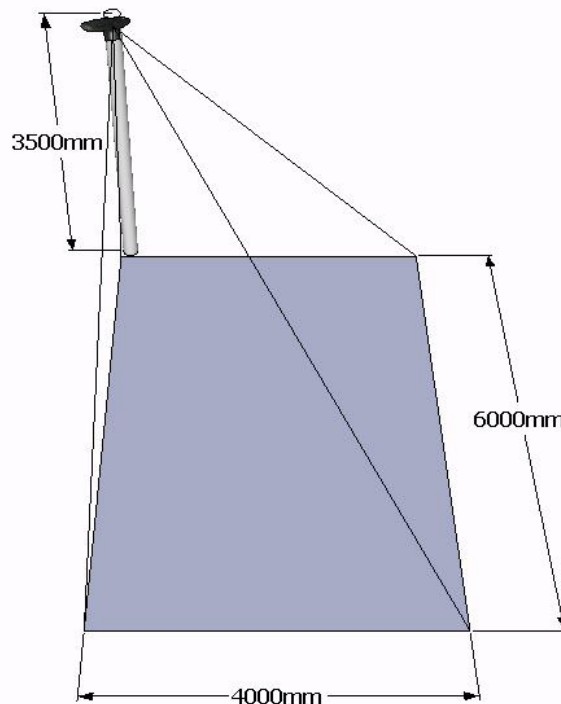
SafeWalk integrates 3D stereovision technology for pedestrian presence detection at any type of pedestrian crossing. Stationary pedestrians waiting and/or those moving in the designated zone will generate a detection output with additional occupancy volume information.

The sensor housing is built with fiber reinforced UV-resistant polycarbonate to withstand the toughest environmental conditions. The mounting bracket contains an integrated connection box for wiring and connecting of the sensor:



SafeWalk is available in 2 versions ETH or BPL for stand-alone or centralized traffic control systems.

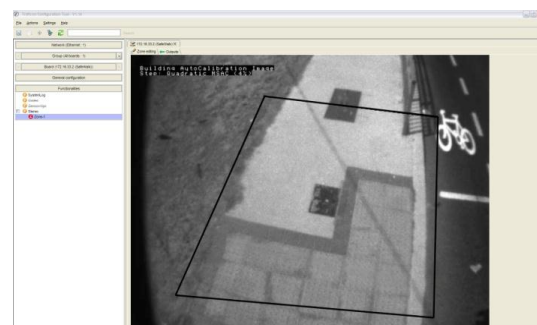
With its wide field of view, SafeWalk can cover a detection zone of 4m x 6m at an installation height of 3m50



The SafeWalk is IP-addressable and uses TCP/IP Ethernet communication for configuration & monitoring.

Configuration via TCT:

- Detection zone
- Masking zone
- Parameter configuration
- Output mode selection
- Detection verification
- Streaming video display



Technical Specifications

Functional

Detection zone size	Configurable up to 6m x 4m
Stereo vision processing	Ignores low objects < 0.5m e.g. shadow, headlight reflections
Pedestrian detection accuracy	>98%
Functionalities	Detects waiting and/or moving pedestrians Detects zone occupancy percentage

Installation

Mounting height	3.00 m – 4.00 m
Fixation	Stainless steel retaining straps max. 20mm M8 bolts

Electrical

Power input	12-48 VDC +/- 10% 24-30 VAC +/-10% 50/60Hz
Current consumption (at 24VDC)	<u>ETH version:</u> <ul style="list-style-type: none"> ▪ 100mA ▪ 110mA with streaming video <u>BPL version:</u> <ul style="list-style-type: none"> ▪ 150mA ▪ 160mA with streaming video
Outputs	Optical insulated dry contacts, max 50V/50mA Configurable close/open on detection and occupancy level <u>ETH version:</u> <ul style="list-style-type: none"> ▪ 2 outputs direct: 1N/C and 1 N/O ▪ 2 N/C outputs via ETH interface <u>BPL version:</u> <ul style="list-style-type: none"> ▪ 2 outputs direct: 1N/C and 1 N/O ▪ 4 N/C outputs via TI x-stream BPL interface
Cabling	<u>ETH version:</u> 8-wires twisted pair Cat5e UTP max. 100m <u>BPL version:</u> 2-wires (+,-) max. 300m <ul style="list-style-type: none"> ▪ Min. 0,64 mm (0,32 mm², AWG22) for up to 120 m cable length ▪ Min. 0,8 mm (0,50 mm², AWG20) for up to 200 m cable length ▪ Min. 1 mm (0,75 mm², AWG18) for up to 300 m cable length
(note: use UV-resistant cables)	
Cable diameter	Min. 2mm up to max. 7 mm

Network

Protocols	RTP, ARP, UDP, TCP, IP, FTP, SSH, RTSP
Communication	Trafficon XML2 Protocol
Ethernet	10/100 Base-T, auto-sensing, half/full duplex

Video

Video compression	MPEG-4 configurable 1 to 4 Mbit/s
Resolution	VGA 640 x 480
Frame rate	25 fps
Video sensor	2 x B&W CMOS ¼" Wide Dynamic Range
Lens	2.1mm IR pass
FOV	H: 98° V: 74° D: 122°

Software

Firmware	Upgradable via TCT
Configuration	TCT Traficon Configuration Tool (included CD-ROM)

Housing

Dimensions (H x W x L) in mm	230 x 310 x 180
Weight	780g
Housing material	Fibre reinforced polycarbonate (UV-resistant)

Environmental

Required min. Illumination level	10 Lux – external IR illuminator optional
Sealing/Enclosure	Ingress protection IP68 Impact protection IK07
Operating temperature range	EN50556: -40°C to +60°C (°F to °F) NEMA TS2 -34°C to +74°C (°F to °F)
EMC	EN50293 (immunity, surges, ESD, EFT, power dips) Emission: EN55022 class B Emission: FCC part 15 class B
Safety	Insulation class II EN60950-1

Regulatory

Directives	EMC 2004/108/EC LVD 2006/95/EC RoHS 2011/65/EU
Product standards	NEMA TS2 EN50556
HA specification	TR2507

Ordering information

10-6070 SafeWalk ETH	SafeWalk pedestrian detector ETH version
10-6075 ETH interface	Detector ETH interface
T3-CABLE8 ETH cable	Cat5e STP cable UV-resistant
10-6072 SafeWalk BPL	SafeWalk pedestrian detector BPL version
10-6045 TI x-stream BPL	Detector BPL interface
10-6044 TI xp BPL	Expansion board
T3-CABLE3 power cable	3-wires BPL power cable UV-resistant
10-6055 TI x-stream BPL Edge	Detector BPL interface – US Edge connector
10-4670 4/Os xp Edge	Expansion board – US Edge connector

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This datasheet applies as additional information to the SafeWalk manual and SafeWalk system description.

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