AIT
AUSTRIAN INSTITUTE OF TECHNOLOGY
TOMORROW TODAY

smart eye ▶ UCOS
UNIVERSAL COUNTING SENSOR

REVOLUTIONIZING PEOPLE COUNTING TECHNOLOGY

smart eye UCOS is an intelligent bio-inspired optical sensor for automated overhead people counting that outperforms other technologies in extreme situations such as dense flow conditions, evanescent object spacing and large counting rates. smart eye UCOS is deployable in indoor as well as outdoor applications.

Privacy protection is guaranteed as no conventional image data that could contain facial features or other person-relatable information are recorded by the sensor. Changing shadows, poor illumination of the detection area, heat sources or static obstructions (decorations, plants, etc.) do not compromise the system`s counting accuracy. Due to the excellent dynamic range of the optical sensor, smart eye UCOS works even under difficult light conditions (from poor light to bright sunlight).

FEATURES

- ▶ Pass and area related people counting
- ▶ Flow-direction dependent people counting
- ▶ Highly cost effective
- ▶ High counting accuracy
- ▶ Ideally suited for dense crowds
- ▶ Time interval summation or individual person data output (moving direction, walk through position, date, time, sensor ID; time intervals adjustable from 1 second to 1 day)
- ▶ Automatic background adaption
- ▶ Insensitive to poor and/or varying lighting conditions
- ▶ No problem with shadows
- ▶ Compact single-box solution, no additional hardware required
- ▶ Data interfaces: Ethernet
- ▶ Extremely low power consumption
- ▶ Simple installation and starting up
- ▶ Remote device control via Ethernet
- ▶ Implicit privacy protection (no camera)
- ▶ Offline-Feature: results are stored > 34 weeks
- ▶ Online-Feature: data-loss-prevention in case of network-issues (up to 7 days)

APPLICATIONS

- ▶ Shops
- ▶ Department Stores
- ▶ Shopping malls
- ▶ Museums
- ▶ Cultural events
- ▶ Public Buildings
- ▶ Exhibition halls
- ▶ Subway stations
- ▶ Airports
- ▶ Single-entry access

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INFORMATION

smart eye UCOS delivers reliable information on visitor or customer traffic in shopping and business areas, public spaces, exhibitions, at tradeshows, etc.. The acquired data can be useful e.g. for assessing the impact of advertising activities, increasing sales conversion rates, accelerate manpower re-assignment, as a basis for evaluating retail space rental fees, or simply for measuring the number of visitors of an arts exhibition.

smart eye UCOS is an all-in-one solution and requires no additional peripherals. Optical detection, data processing (single or interval), data interface (RS485 or Ethernet) and memory capacity for up to one month worth of data are integrated in one compact little box. An accessory housing for outdoor use is available.

Maintenance, testing and change of operating parameters can be done via easy-to-use remote interface. smart eye Server software supports the easy transfer of recorded data to a database.

SPECIFICATIONS

▶ Aluminum housing with transparent plastic front cover
▶ Power supply 12 – 30 VDC
▶ Power consumption: max. 4 W
▶ Ethernet RJ45 and Serial RS485 interfaces
▶ CE conformity
▶ Temperature range 0 °C to +55 °C
▶ Humidity range: 0 % to 95 %, non-condensing
▶ Indoor use
▶ Outdoor use possible with accessory housing
▶ Installation: Overhead in the middle of the passageway
▶ Optimization possibility for pulsed light sources (such as halogen bulb lamps) in the vicinity of the sensor
▶ Dynamic range: 100 lx to 100.000 lx (from poor light to bright sunlight)
▶ Weight: 0,98 kg (UCOS2)
▶ Dimensions:
   175x105/Depth 88 mm (UCOS2)

MAX.-VALUES (M)

	UCOS2
Mounting height	4
Detection width	3,07

AVAILABLE SOFTWARE

▶ smart eye Center (for configuration and remote control)
▶ smart eye Server (data interface for DB)

OPTIONS

▶ Outdoor use possible with accessory housing

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