

Typical Applications

- ✓ Temporary or permanent traffic data collection
- ✓ Acquires individual vehicle records (count, speed, vehicle class-by-length) or interval-averaged values
- ✓ Queue zone management
- ✓ Easily integrates with ADEC Camina I/O system to control traffic lights
- ✓ Counting to assess road construction or expansion needs
- ✓ Temporary counting during road construction or large events and festivals
- ✓ Update traffic models to include new realities

Unique Features

- ✓ Works well with permanent power, intermittent power, or no external power at all
- ✓ Browser-based dashboard for management and data access
- ✓ Easy Integration to third-party applications via Azure Service Bus
- ✓ Works with preferred mobile operator or ADEC-supplied SIM card
- ✓ Non-intrusive
- ✓ Quickly and easily deployed
- ✓ Simple plug & play setup

TDC1-PIR Traffic Detector

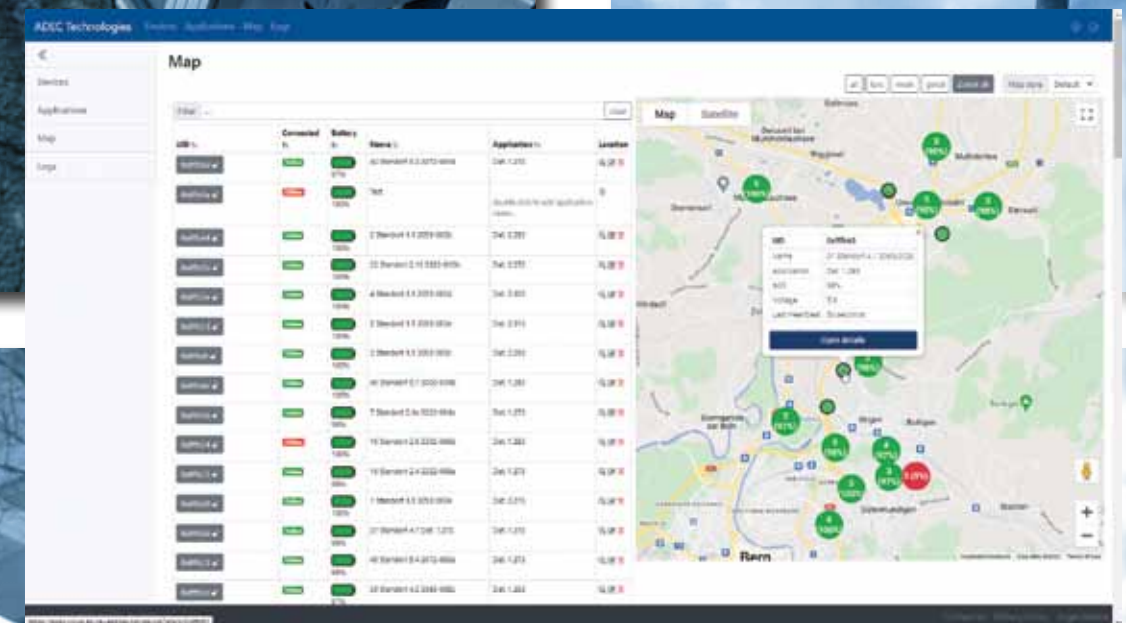
- ✓ 5-channel PIR sensor array
- ✓ Power-conserving architecture
- ✓ Monitors a single lane of traffic
- ✓ Classification into three length-based vehicle classes
- ✓ Wide mounting range of 5.5 m - 18 m (18 - 60 ft.) from monitored lane
- ✓ Mounting overhead or side of the road
- ✓ Detection of wrong-way drivers
- ✓ Optimal performance in all weather conditions



BS2-TS30 with four TDC1-PIR and JBL3 junction box in Regensburg (Germany)

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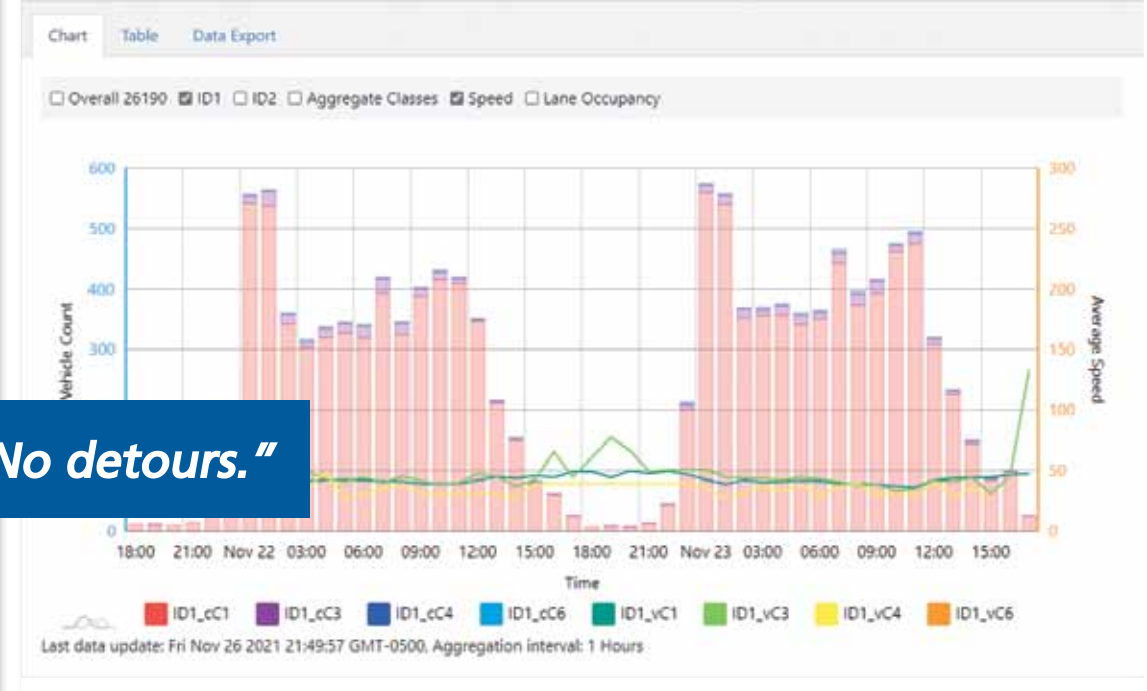
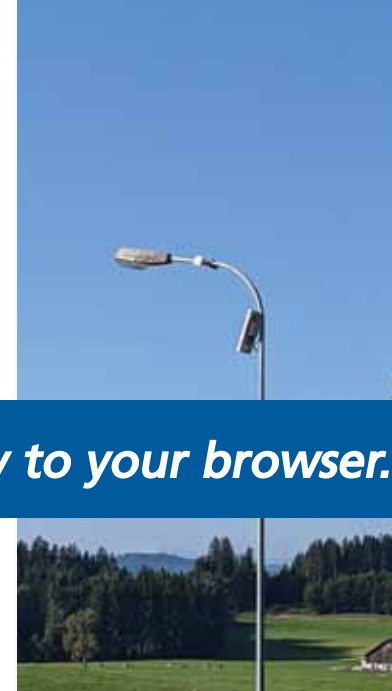
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Internet-of-Things (IoT) Traffic Data Collection



“...directly to your browser. No detours.”



ADEC Technologies

is a globally leading manufacturer from Switzerland of innovative traffic detectors. Architects, engineers, installers and system-integrators worldwide turn to ADEC when looking for reliable and maintenance-free detectors for their traffic management solutions.

Solar-Powered IoT & Cloud Integration

Information about the traffic situation directly from the roads to the browser or any third-party system via simple web-APIs: The BS2-TS IoT gateway is an autonomous, solar-powered system for collecting traffic data using up to three TDC1-PIR and transmitting them to the ADEC Cloud via GSM.

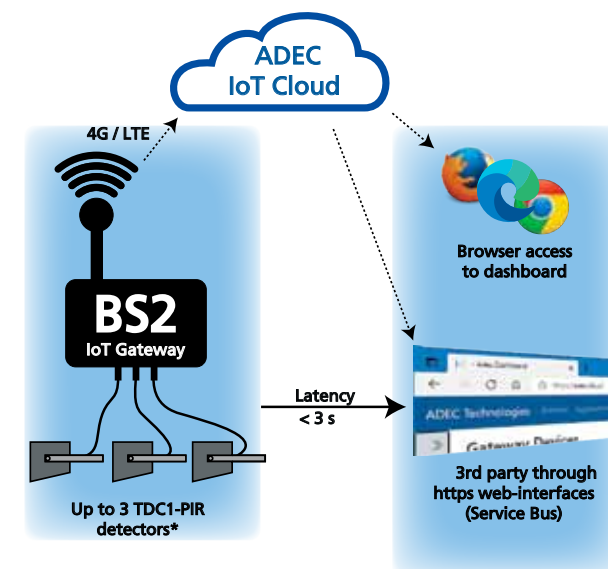
Internet-Accessible Traffic Data

A user-friendly, web-based dashboard offers commissioning, operational and monitoring functions. In addition, reports can be automatically generated, and near real-time traffic data can be retrieved for further processing by third-party software via standard (Azure Service Bus) web interfaces.

Queue Zone Management

influences a traffic lights' timing by queue size. The queue length is measured using one or more BS2/TDC1 measurement points. In the cloud, speed- and occupancy-criteria are applied to all incoming vehicle events. Queue length is communicated back from the cloud to traffic lights' controller. The web-based dashboard provides real-time overview and control of the queue zone application. Queue zone management optimizes traffic flow, reduces wait times and pollution.

Completely Autonomous Data Collection



BS2 - IoT Gateway

- ✓ Solar-powered
- ✓ Battery-operated
- ✓ Autonomous operation of three TDC1-PIR for up to five days without sun
- ✓ Integrated charging circuitry with option to power via intermittent power source such as streetlights
- ✓ On-board 4G-modem
- ✓ Software updates over-the-air (OtA)
- ✓ Small form factor & light weight for minimal wind load 255 x 355 x 90 mm @ 3.9 kg (10.1" x 14" x 3.5" @ 8.6 lbs)**
- ✓ Designed to be installed and operated with ADEC IoT Server (<https://adec.cloud>)



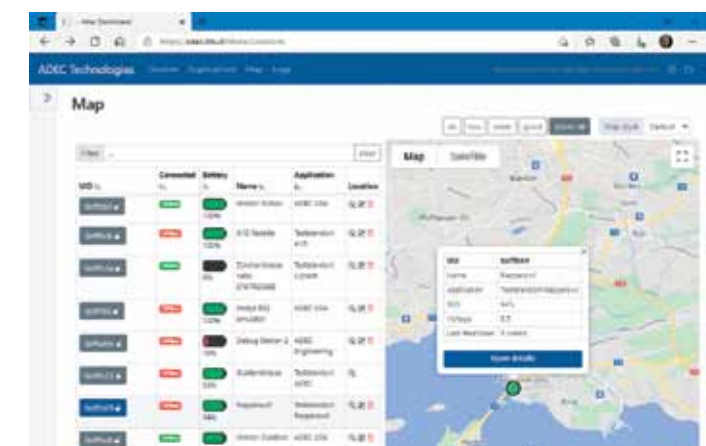
Easy Setup and Data Retrieval

- ✓ Create Account on ADEC cloud <https://adec.cloud>
- ✓ Mount and align BS2-TS and traffic detectors
- ✓ Configure detectors' mounting height via web-browser
- ✓ Collect & download traffic data

ID	Gateway	Name	Application	Battery	Signal	Status	Last Heartbeat	PIR
1	BS2-TS	BS2-TS	BS2-TS	100%	100%	OK	10:00	BS2-TS
2	BS2-TS	BS2-TS	BS2-TS	100%	100%	OK	10:00	BS2-TS
3	BS2-TS	BS2-TS	BS2-TS	100%	100%	OK	10:00	BS2-TS
4	BS2-TS	BS2-TS	BS2-TS	100%	100%	OK	10:00	BS2-TS

Browser Access For All Relevant Tasks

- ✓ Monitor BS2 gateways and Camina I/O actuators
- ✓ Add, remove and configure detectors
- ✓ Configure queue zone management and assign individual measurement points to digital outputs
- ✓ View and CSV-download historic traffic data for further processing and external storage



*) with individual vehicle records. BS2-TS30 can operate up to 5 TDC1-PIR detectors with 5-minute (or longer) interval-data

***) For certain geographic areas, the 30W solution is recommended which is 345 x 555 x 90 mm @ 5.2 kg