

Real-Time Travel Time Executive (RTTE) Software

Orange Traffic

Vehicle detection system used to calculate transit times. To facilitate traffic management, Orange Traffic is proposing a Bluetooth $^{\text{\tiny TM}}$ vehicle detection system that calculates transit times between two points in a road system.



Description

The RTTE software is used to analyze the data collected by the system. Using sophisticated algorithms, it processes in real time the data gathered by the BMT-223 detectors to calculate average transit times and forecasts. The data are also stored for later extraction and analysis by other offline software applications.

The RTTE software is comprised of two applications that can operate together or separately:

TPANACOLLECTOR is a Bluetooth data collection tool with a browsing interface that monitors system operations

Trakker is a real-time transit time calculation engine

TPANACOLLECTOR

TPANACOLLECTOR is equipped with a user interface that meets industry standards. It is designed to operate autonomously, for temporary data collection, or to be integrated with Trakker.

The tool queries the detectors and displays the Bluetooth data returned in real time: MAC addresses, voltage, cellular signal strength, longitude and latitude, temperature and other parameters (depending on how the detectors were configured).

The tool reports where the detectors are located on a map and can generate graphs and charts from the data gathered by Trakker. It also uses a colour code to indicate the status of each detector.

TPANACOLLECTOR can generate raw Bluetooth data (analyzed in real time) or data collected at 1-minute intervals (not analyzed in real time). It can also generate an XML file containing transit time data for use by another system.

Trakker

The Trakker calculation engine collects Bluetooth data gathered from the detectors to calculate—in real time—the transit times along a given connection or itinerary.

In order to make this calculation, the route taken by a Bluetooth device must first be established. For this purpose, the calculation engine filters the data to eliminate outliers and determine which detections are valid.

Trakker then generates an XML file including real-time transit time data.

Trakker also monitors the system's operations. To that end, it probes the detectors in search of potential battery or communication problems, triggers alarms and generates reports on any such alarms.

Specifications

For more information: 1 800 363-5913

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