

Data Sheet: Telent Optima Hub - Overview



Optima Hub - Overview

The Telent Optima Hub is a web based, modular Intelligent Transport System (ITS) which is managed and hosted by Telent. The system integrates data from multiple sources and presents it in a simple, easy to digest format. Modules include Traffic Signal Controller Remote Monitoring, CCTV, Air Quality, Count Data, Bus Priority and Remote I/O.

Overview

The Optima Hub is a hosted system which integrates data taken from multiple sources and is scalable, both in number of assets and the sources of data.

The Hub also allows data to be passed between it and connected traffic signal controllers facilitating event message and bus priority messaging between controllers.

The hosted architecture allows for mobile working and only requires access to any modern web browser on a desktop, laptop or tablet device that has an internet connection.

This datasheet gives an overview of the system and its modules. For more information on the individual modules, refer to the relevant datasheet.

Remote Monitoring

The Remote Monitoring module is at the heart of the Optima Hub. It is capable of monitoring telent's Optima controller and, by utilising the Optima Outstation, controllers from 3rd party manufacturers (including telent's legacy controllers, the MTC and Sentinel).

Functionality includes:

- Remote handset port access
- Live view of signal and detector states along with controller mode is available for Optima controllers
- Last gasp message on power fail
- Text and email alerts
- Integration with Fault Management Systems

Air Quality

Centralised collection of data from cost effective, compact sensors which can be fitted to traffic signal poles or street lighting columns. The sensors are capable of monitoring a wide range of gases and particulates. With the data all in one place trends and hotspots can be easily identified.

CCTV

The CCTV module integrates cameras for a step change increase in situational awareness around signalised traffic junctions and crossings. The performance and health of a junction or crossing can now be viewed easily from with the office (or indeed from anywhere with an internet connection and a tablet/ laptop).

Remote I/O

Event trigger messages can be passed between traffic signal controllers and/or Optima Outstations (connected to 3rd party traffic signal controllers) via the hub using the existing communication system, removing the need for site to site cabling.

Bus Priority

Industry standard RTiG bus priority messages (RTiGT031) can be passed from a data broker to individual traffic signal controllers to initiate bus priority via hurry calls or MOVA.

Count Data

Centralised collection of count data from suitably equipped Optima Traffic Signal Controllers or Optima Outstations. This count data could include the number of times a phase has run or classified outputs from an intelligent detector for further analysis or export to other tools.

Real world examples of using this functionality have included counting the number of times a pedestrian phase has run to determine crossing usage (including times of day) and the number of times early start cycle phases have run to establish if changes to a junction have been worthwhile.

Summary:

The Telent Optima Hub utilises interactive maps and a simple interface, providing users with the required level of detail needed to assess and manage the condition of their roadside assets.

Benefits:

- Hosted system with no additional IT to manage
- Access from anywhere via web browser
- Centralised one stop shop for ITS data
- Gives a high degree of situational awareness
- Scalable and futureproof

