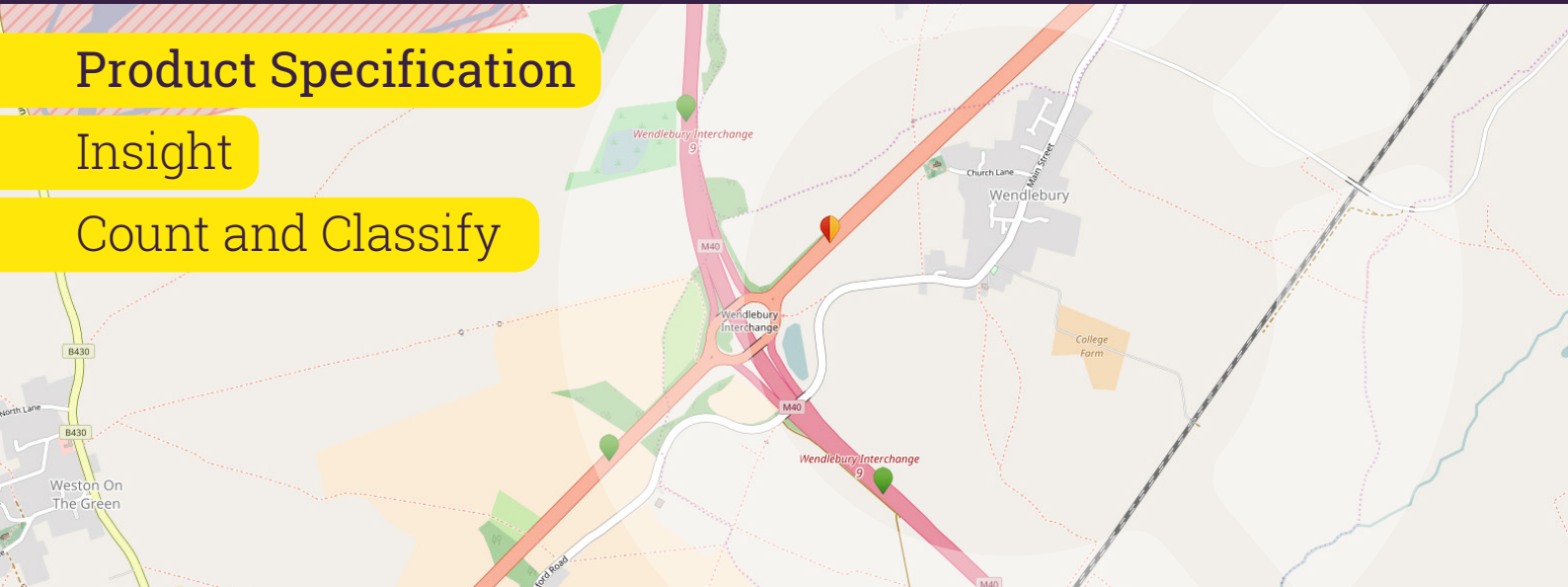


## Product Specification

## Insight

## Count and Classify



Insight® Count and Classify from Clearview Intelligence is an integrated data management solution designed to support accurate and timely decision-making by ITS professionals.

With a suite of tools focussed on optimising service delivery and the effective use of the road capacity, Insight eases the burden of remote data collection, device management, data processing, reporting and analysis.

The Insight Data Management platform is a scalable hosted service underpinning a range of targeted applications for parking optimisation and traffic monitoring.

Insight shares several tools across all applications for ease of administration and the flexibility to deploy multiple applications and modules. The combination of applications within a single platform can provide strategic benefits to operational challenges.



Insight Count and Classify builds on the core platform by providing a dedicated application for traffic monitoring all the way from managing and monitoring roadside equipment through to reporting and analytics.

### Key Benefits

- Automated, efficient process for remote sensor data gathering
- Readily transforms data into intelligence without human intervention
- Personalised tailored view of captured intelligence enabling operators to act promptly
- Drives intelligence sharing with other users and third party systems
- Real-time access anywhere, anytime to inform decision making
- Provides instant answers to complex questions about network or asset performance
- Facilitates more efficient resource utilisation around deployment of traffic officers and maintenance engineers

### Key Features

- Intuitive wizard driven report creation tool
- Integrated data collection utility offering real-time, scheduled and manual collections
- Ability to data share with other systems via JSON & XML data feeds
- Secure, responsive web based user interface with real-time data analysis
- Highly customisable, user definable dashboard portal
- An extensive range of graphical contextual viewing tools
- E-mail, XMPP and browser alerts for device and data quality notifications
- Data editing functions for patching and source editing with full backup and restore

## Device Management

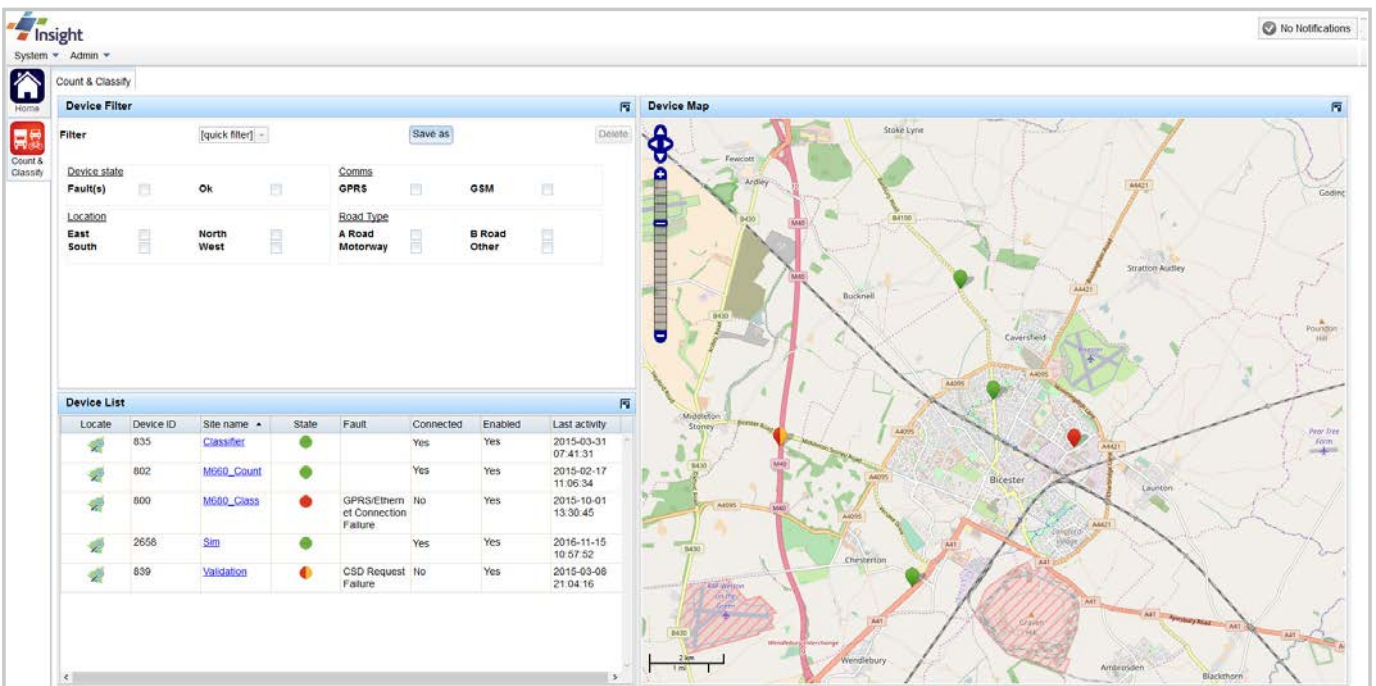
Manage and monitor your roadside devices with ease using our secure web based interface. Insight Count and Classify supports the full range of Clearview Intelligence M600 and M700 series of count classifiers.

Comprehensive filtering options enable you to quickly and easily see the information you need. Filters can be applied based on device characteristics or users can create their own filters to group devices into clusters such as permanent or temporary counters, road speed limits or geographical areas. Filters can be saved and multiple filters can be applied making it easier to manage devices and focus on specific areas.

Filters also affect the embedded geographical maps where device locations are overlaid on to the maps showing current device status and fault indicators.

An extensive audit trail and fault management system ensures that any issues with devices can be notified through on screen indicators, e-mail or via smartphone messaging to ensure that faults are dealt with promptly.

- Support for Clearview Intelligence's M660, M665, M680 and M720 count classifiers
- Fault notification via web, e-mail and smartphone messaging services
- Remote download and upload of configuration files
- System and user defined filters (faults, location, type, etc.)  
Device diagnostic reports
- GSM, GPRS and wired Ethernet devices supported
- Device map overlay and status indicators



Loc.ale	Device ID	Site name	State	Fault	Connected	Enabled	Last activity
	835	Classifier	Green		Yes	Yes	2015-03-31 07:41:31
	802	M660_Count	Green		Yes	Yes	2015-02-17 11:06:34
	800	M660_Coass	Red	GPRS/Ethernet Connection Failure	No	Yes	2015-10-01 13:30:45
	2656	Sim	Green		Yes	Yes	2016-11-15 10:57:52
	839	Validation	Yellow	CSD Request Failure	No	Yes	2016-03-08 21:04:16

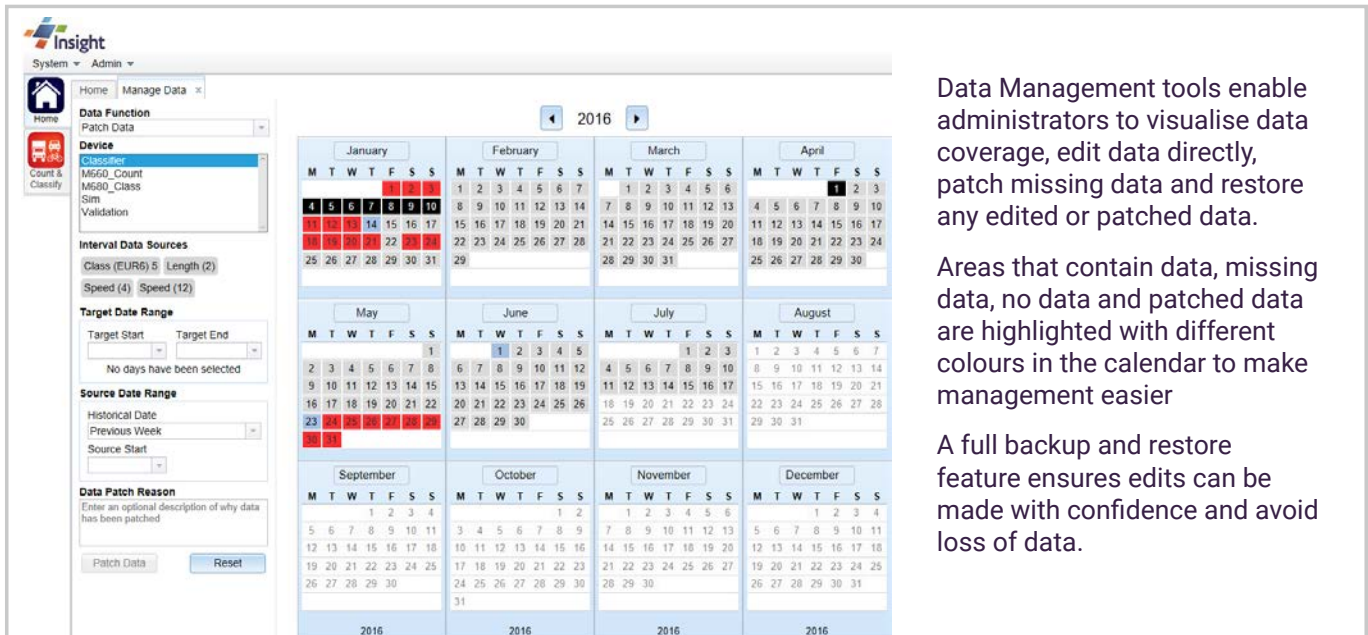
### Data Processing

Insight Count and Classify collects data via GSM, GPRS and wired Ethernet communications. The integrated server based dial-up application provides for user defined schedules, manual dial-up, status updates and event logs.

As data is received several control measures can be applied to verify the quality and validity of the data. Data validation will compare incoming data against historical records highlighting any unusual values.

Insight has been designed to enable users to analyse and report on their data from multiple sources in a single environment. Data can be exported in the industry standard formats of CSV (Comma Separated Values), XML (Extensible Markup Language), PDF and Excel.

- GSM Dial-Up with manual and scheduled data collection GPRS and wired Ethernet data collection
- Support for Interval, IVD and VBV data formats
- Import GR Format
- Export CSV, XLS, PDF, JSON and XML data
- Data management facilities to edit and patch data with restore capability
- Set of data quality tools to identify missing data or unusual values.



The screenshot shows the 'Insight' web application interface. On the left, there is a navigation menu with options like 'Home', 'Manage Data', 'Data Function', 'Patch Data', 'Device', 'Interval Data Sources', 'Target Date Range', 'Source Date Range', and 'Data Patch Reason'. The main area displays a calendar for the year 2016, with each month's calendar grid showing data points for each day. Different colors are used to highlight specific data points: red for missing data, green for patched data, and blue for data that has been edited. The interface also includes various filters and controls for data management.

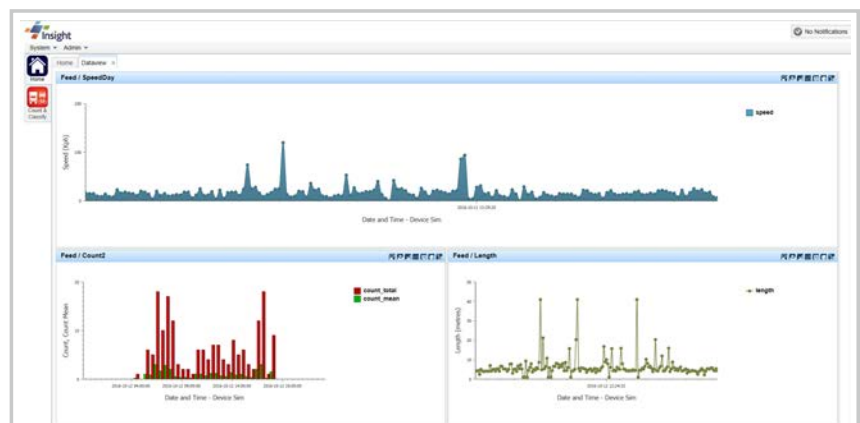
Data Management tools enable administrators to visualise data coverage, edit data directly, patch missing data and restore any edited or patched data.

Areas that contain data, missing data, no data and patched data are highlighted with different colours in the calendar to make management easier

A full backup and restore feature ensures edits can be made with confidence and avoid loss of data.

### Custom Dashboards

Custom dashboards provide a quick and easy method of delivering information allowing informed decisions to be made with up to date and relevant data. Reports can be presented on screen where the user can easily export, print, or change allowable parameters (date, device, time). Reports can also be configured so that the user is always presented with the most up to date information or for a set time period meaning there is no longer the need to waste time exporting, formatting and emailing reports.



### Reporting and Analysis

In keeping with Insight's focus on ease of use and flexibility, the solution includes a set of the most commonly used count and classification reports. Reports can be modified or new ones created with the user friendly, yet powerful "report wizard". Many elements of report writing involve carrying out the same repetitive tasks with just a few minor changes. Calculations such as the 85th Percentile using both Interval and VBV data can be added easily to aid in analysing the data. The reporting module's in-built features include:

- Powerful but easy to use report creator
- Comprehensive set of count and classify reports included and modifiable
- Point and click graph creation with multiple theme options
- Pre-set formulas for analysis such as the 85th percentile calculation
- Switch between Graph and Table format with one click
- Export to PDF and Excel
- Reports can be used as data feeds for display on websites

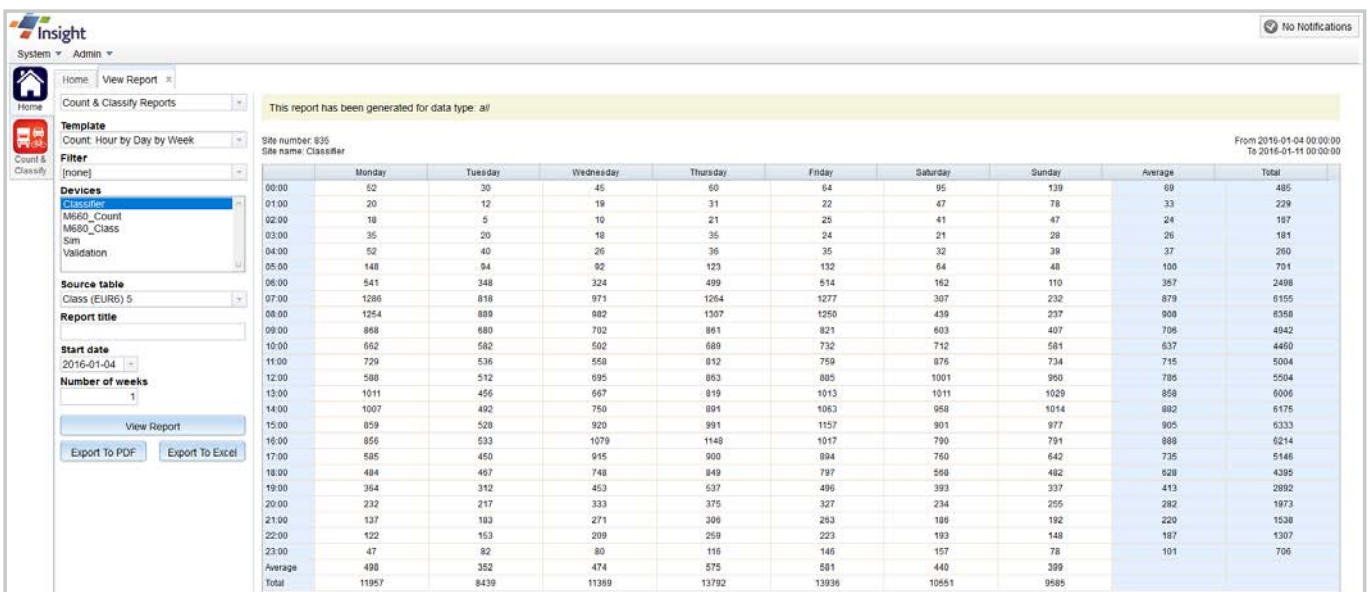
### Web browser platform independent

Insight Count and Classify has been designed to comply with the latest standards of cross browser compatibility and as such the system will work across many different web browser platforms including:

- Firefox 5 or above
- Safari 5 or above
- Chrome 13 or above
- IE 10 or above
- Opera 12 or above

### The benefits of Insight

- Easy to use, powerful report wizard means novice users can create simple reports with ease and access the information they need on demand
- Web based customisable dashboards provide a secure method to deliver both historical and real-time information direct to the desktop empowering users to make informed decisions
- Extensive fault alerts provide feedback on roadside devices enabling both pro-active and re-active responses to prevent or minimise data loss
- Customisable interface optimises the workspace for the user's role providing a more intuitive workflow and providing quick and easy access to common features and functions



The screenshot shows the Insight web application interface. The main content area displays a report titled 'Count & Classify Reports' for site number 925 and site name 'Classifer'. The report is generated for data type 'all' and covers the period from 2016-01-04 00:00:00 to 2016-01-11 00:00:00. The report is presented as a table with columns for days of the week (Monday to Sunday), Average, and Total. The rows represent different device classes and times of day, ranging from 00:00 to 23:00. The 'Total' column shows the sum of counts for each row across all days.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Average	Total
00:00	52	30	45	50	64	95	139	69	485
01:00	20	12	19	31	22	47	78	33	229
02:00	18	5	10	21	25	41	47	24	187
03:00	35	20	18	35	24	21	28	26	181
04:00	52	40	26	36	35	32	38	37	260
05:00	148	94	92	123	132	64	48	105	791
06:00	541	348	324	499	514	162	110	357	2498
07:00	1286	818	971	1264	1277	307	232	879	6155
08:00	1254	889	882	1307	1250	439	237	908	6358
09:00	888	680	702	861	821	603	407	706	4942
10:00	662	582	502	689	732	742	581	637	4460
11:00	729	536	550	812	759	876	734	715	5004
12:00	589	512	695	863	885	1001	950	785	5504
13:00	1011	456	667	819	1013	1011	1029	858	6006
14:00	1007	492	750	891	1063	958	1014	892	6175
15:00	859	528	920	991	1157	901	977	905	6333
16:00	856	533	1079	1148	1017	790	791	888	6214
17:00	585	450	915	900	894	760	642	735	5146
18:00	484	467	748	849	797	598	482	628	4395
19:00	364	312	453	537	496	393	337	413	2892
20:00	232	217	333	375	327	234	255	282	1973
21:00	137	183	271	308	283	186	192	220	1538
22:00	122	153	209	259	223	193	148	187	1307
23:00	47	82	80	116	146	157	78	101	706
Average	498	352	474	575	591	440	399		
Total	11957	8439	11389	13792	13936	10551	9585		