An automated “distance over time” speed enforcement solution

Overview

The 3M™ Average Speed Camera System is a Home Office Type Approved (HOTA) solution, suitable for deployment in several speed enforcement applications including, but not limited to:

- Speed enforcement to ensure speed limit compliance
- Speed enforcement to help minimise congestion
- Urban speed enforcement, to eliminate side street rat-runs
- Traffic calming to reduce carbon emissions
- Speed enforcement in school and residential areas

This system utilises dual cameras (IR and colour) and requires the use of a separate server and 3.5G connection. Each system server is configured with the site-IDs, camera-IDs of the deployed cameras along with the distance and enforcement speed between sites. There is a common enforcement speed applied to all enforcement lengths within a system (site-A to site-B and site-B to site-A). Capable of enforcing all speed limits of 20mph and above.

The 3M Average Speed Camera System computes the average speed of every vehicle detected at every site and compares this with the enforcement speed. If a violator is detected, the authenticated and encrypted images of the vehicle passing the linked sites are pulled from each camera for evidential records. A combined violation record is then generated. The record comprises of the camera site-IDs, enforcement link details, measured speed and time of violation, as well as the previous images. The entire violation record is then authenticated and encrypted and is written to a CD.
3M™ Average Speed Camera System

Specifications

<table>
<thead>
<tr>
<th>Dimensions (LxWxH)</th>
<th>426mm x 260mm x 205mm (including hood &amp; Garmin)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>7.8kgs (including hood &amp; Garmin) 5.7 kgs</td>
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<tr>
<td>Full Resolution</td>
<td>IR Channel: 1,392 x 512 pixels</td>
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<tr>
<td></td>
<td>Colour Overview Channel: 720 x 288 pixels</td>
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<tr>
<td>Field Rate</td>
<td>50 field/second</td>
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<tr>
<td>Power Consumption</td>
<td>35W, 48 Vdc</td>
</tr>
<tr>
<td>Operating System</td>
<td>Embedded Linux</td>
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<tr>
<td>Operating Temperature</td>
<td>-40°C to +60°C</td>
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<tr>
<td>Illumination</td>
<td>Effective range: up to 28.9 meters</td>
</tr>
</tbody>
</table>

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