

# Florida Traffic Infraction Detector Equipment and Testing Compliance Matrix

Date: 1-Jul-11

Manufacturer: Gatsometer BV

Authorized Official  
Name (print): Richard J Kosina

Item, Model No.: Intersection Safety Camera, GTC-GS11

Signature:

*Richard J. Kosina*

| ID | No.   | Section                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Requirement | Item comply?<br>(Yes/No) | Comments |
|----|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------|----------|
| 1  | 1.3.1 | TID defines 'Compliant Vehicle' as a motor vehicle that stops behind the stop bar or clearly marked stop line when facing a traffic control signal steady red indication or traveling over the stop bar or clearly marked stop line when facing traffic control signal steady green or steady yellow indications.                                                                                                                                                                                        | Yes         |                          |          |
| 2  | 1.3.2 | TID defines 'Event' as when a motor vehicle fails to stop behind the stop bar or clearly marked stop line when facing a traffic control signal steady red indication.                                                                                                                                                                                                                                                                                                                                    | Yes         |                          |          |
| 3  | 1.3.4 | Section 316.003(87), Florida Statutes defines a TID as a vehicle sensor installed to work in conjunction with a traffic control signal and a camera or cameras synchronized to automatically record two or more sequenced photographic or electronic images or streaming video of only the rear of a motor vehicle at the time the vehicle fails to stop behind the stop bar or clearly marked stop line when facing a traffic control signal steady red light.                                          | Yes         |                          |          |
| 4  | 2.1   | TID captures an Event with a single vehicle in a single through lane.                                                                                                                                                                                                                                                                                                                                                                                                                                    | Yes         |                          |          |
| 5  | 2.2   | TID captures an Event with a single vehicle in a single through lane with the presence of multiple compliant vehicles in the same lane.                                                                                                                                                                                                                                                                                                                                                                  | Yes         |                          |          |
| 6  | 2.3   | TID captures an Event with a single vehicle in a single through lane with the presence of multiple compliant vehicles in the same and adjacent through lanes.                                                                                                                                                                                                                                                                                                                                            | Yes         |                          |          |
| 7  | 2.4   | TID captures multiple Events with multiple vehicles in a single through lane.                                                                                                                                                                                                                                                                                                                                                                                                                            | Yes         |                          |          |
| 8  | 2.5   | TID captures multiple Events with multiple vehicles in the same and adjacent through lanes.                                                                                                                                                                                                                                                                                                                                                                                                              | Yes         |                          |          |
| 9  | 2.6   | TID meets the requirements of Sections 2.1 - 2.5 for left turn lane Events.                                                                                                                                                                                                                                                                                                                                                                                                                              | Yes         |                          |          |
| 10 | 2.7   | TID is capable of identifying Events where the speed of a single vehicle or multiple vehicles making a right turn on red is more than a configurable threshold speed. Speed is in miles per hour.                                                                                                                                                                                                                                                                                                        | Yes         |                          |          |
| 11 | 3.1   | TID captures and stores photographic or electronic image of the intersection that includes the rear of the vehicle and license tag at a time the vehicle is in advance of the stop bar or clearly marked stop line with the corresponding traffic control signal steady red light visible in the image.                                                                                                                                                                                                  | Yes         |                          |          |
| 12 |       | TID captures and stores photographic or electronic image of the intersection that includes the rear of the vehicle and license tag at a time the vehicle is beyond the stop bar or clearly marked stop line with the corresponding traffic control signal steady red light visible in the image.                                                                                                                                                                                                         | Yes         |                          |          |
| 13 |       | If Right Turn on Red events are enforced, TID captures and stores a minimum of 5 seconds of streaming video of the intersection that includes the rear of the vehicle and license tag beginning at a time the vehicle is in advance of the stop bar or clearly marked stop line with the corresponding traffic control signal steady red light and ending at a time after the vehicle is beyond the stop bar or clearly marked stop line with the corresponding traffic control signal steady red light. | Yes         |                          |          |
| 14 |       | At least one of the two photographic or electronic images of the license tag, including license tag state, number and specialty logo (if applicable), is clearly legible. The viewable images have a minimum pixel resolution of 640 by 480.                                                                                                                                                                                                                                                             | Yes         |                          |          |
| 15 |       | The video has a minimum pixel resolution of 320 by 200 with a minimum frame rate of 5 frames per second.                                                                                                                                                                                                                                                                                                                                                                                                 | Yes         |                          |          |
| 16 |       | TID includes protective measures to prevent modification or unauthorized manipulation of captured and stored photographic or electronic images and video.                                                                                                                                                                                                                                                                                                                                                | Yes         |                          |          |
| 17 |       | TID does not capture nor store any front photographic or electronic images or videos of vehicle occupants.                                                                                                                                                                                                                                                                                                                                                                                               | Yes         |                          |          |

| ID | No. Section | Requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Item comply?<br>(Yes/No) | Comments |
|----|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------|
| 18 | 3.2         | TID captures and stores the following Event information in English text and/or Arabic numerals: 1. Names of intersecting Street and Highways; 2. A unique identifier of the intersection; 3. Lane number; 4. Direction of travel; 5. Month, day and year of the Event; 6. Hour, minute, and second of the photographic or electronic images in the local time; and 7. The difference in time from the beginning of the traffic control signal steady red light to the associated photographic or electronic images in tenths of a second. | Yes                      |          |
| 19 |             | The time of the photographic or electronic images or video are synchronized to an external source such that it is always within plus or minus one minute of Coordinated Universal Time (UTC).                                                                                                                                                                                                                                                                                                                                             | Yes                      |          |
| 20 |             | The alpha-numeric data and corresponding photographic or electronic image(s) are automatically captured at the same time. The data is associated with the photographic or electronic image without human intervention.                                                                                                                                                                                                                                                                                                                    | Yes                      |          |
| 21 | 4.1         | The TID equipment does not interfere with any traffic control signal or other FDOT or Traffic Signal Maintaining Agency equipment. TID equipment that requires regulation by the Federal Communications Commission (FCC) meets the requirements in the 2005 Code of Federal Regulation (CFR), Title 47, Part 15, and is FCC certified. The FCC identification number is externally displayed on the TID equipment.                                                                                                                        | Yes                      |          |
| 22 | 4.2         | If visible illumination is used, the power of an illuminator (flash) device does not exceed 350 watts/second.                                                                                                                                                                                                                                                                                                                                                                                                                             | Yes                      |          |
| 23 | 4.2         | The illuminator device has the capability of being filtered and/or positioned to limit effects on the drivers' field of vision.                                                                                                                                                                                                                                                                                                                                                                                                           | Yes                      |          |
| 24 | 4.3         | TID cabinets and camera housings have protective measures against vandalism.                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Yes                      |          |
| 25 | 5.0         | If the Traffic Signal Maintaining Agency allows access to the traffic control signal cabinet, the TID does not impact operations or maintenance of the traffic control signals, pedestrian signals, or any other traffic control devices.                                                                                                                                                                                                                                                                                                 | Yes                      |          |
| 26 | 5.1         | Any attachment to traffic control signal cabinet wiring is electrically isolated from the traffic control signal cabinet. Electrical sensing devices are "donut" current transformers or Hall-effect devices. No other physical or electrical connections to traffic signal control circuits are allowed, including load switch driver control circuits, load switch signal circuits and detection circuits.                                                                                                                              | Yes                      |          |
| 27 | 5.2         | All TID equipment is electrically isolated from traffic signal equipment. If the Traffic Signal Maintaining Agency allows access to the traffic control signal cabinet, a surge protective device(s) is installed on any conductive bonds between the traffic control signal cabinet equipment and the TID equipment to protect the traffic signal equipment.                                                                                                                                                                             | Yes                      |          |
| 28 |             | If electric power is obtained from an FDOT or Traffic Signal Maintaining Agency power service, a surge protective device(s) is installed between the TID equipment or circuit breaker and the power service. All surge protective devices and grounding systems installed meet the current FDOT Standard Specifications for Road and Bridge Construction.                                                                                                                                                                                 | Yes                      |          |
| 29 | 6.0         | Testing is conducted in accordance with the manufacturer's recommendations or in accordance with the County or City testing requirements, whichever is more stringent. Testing is conducted at regular intervals in accordance with the manufacturer's recommendations or in accordance with the County or City testing requirements, whichever is more frequent.                                                                                                                                                                         | Yes                      |          |
| 30 |             | Testing includes, at minimum, System Test Function and Self Test Function.                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Yes                      |          |
| 31 | 6.1         | The TID activates and creates Event information consistent with an Event, when artificially activated by a system test function.                                                                                                                                                                                                                                                                                                                                                                                                          | Yes                      |          |
| 32 | 6.2         | The TID performs and records the results of a daily internal self test sequence that confirms proper operation of each critical system component.                                                                                                                                                                                                                                                                                                                                                                                         | Yes                      |          |
| 33 | 6.2         | If the system fails on one or more portions of the internal self test, the system renders itself inoperable until a successful internal self test is recorded.                                                                                                                                                                                                                                                                                                                                                                            | Yes                      |          |
| 34 | 7.0         | The TID manufacturer provides: • Installation and/or users manual(s) required to install and calibrate all TID equipment; • Operations, maintenance and/or service manual(s) required to operate and maintain all TID equipment; • Testing results in accordance with Section 6.0 (ID numbers 30 through 33) of the Traffic Intrusion Detector Equipment and Testing Specifications.                                                                                                                                                      | Yes                      |          |