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Maintenance Bureau Specification 2010-05
for
Hand-Held Traffic Data Collector
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This document describes the features and specifications for a “Hand-Held Traffic Data Collector”.

1.0 Features:

- 1.01 Unit shall not exceed 10” high by 8” wide and 2” deep/thick.
- 1.02 Unit shall be capable of being powered by batteries or external power supply with an attached auto cigar plug.
- 1.03 Unit shall not exceed 3 pounds in weight during operation, to include batteries.
- 1.04 Unit shall be housed in a non-warping case that is resistant to UV degradation.
- 1.05 Unit shall contain enough internal memory to store multiple studies before download is required.
- 1.06 Shall be capable of transferring data via USB connection to a computer. Cable shall be included with unit.
- 1.07 Front of the unit shall contain a display with a minimum of 4 lines of text containing a minimum of 20 characters per line.
- 1.08 All buttons/keys to log data shall be included on the front of the unit and shall be logically arranged for collecting intersection data. Shall also be capable of applying different face-plate skins depending on the data study being conducted.
- 1.09 Unit shall contain an active, real-time clock for time-stamping data.
- 1.10 Shall be capable of collecting the following types of data:
 - A. Turning Movement Data for 3 & 4 – leg intersections without vehicle classification.
 - B. Turning Movement Data for 3 & 4 leg intersections with vehicle classification capabilities for a minimum of 13 different vehicle classes/types.
 - C. Turning Movement Data for roundabouts, with or without vehicle classifications.
 - D. Stop Sign Delay Studies at unsignalized intersections.
 - E. Intersection Delay Studies at signalized intersections.

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- G. Gap Studies up to two directions.
- H. Spot Speed Studies with the capability of vehicle classification.

- 1.11 Unit shall be menu driven for operation and communication purposes.
- 1.12 Unit shall contain some sort of diagnostic tests to ensure memory, buttons/keys, display, and communication all are working properly. Shall also include a battery status indicator on the display to indicate either battery status or external power connection.
- 1.13 Unit shall produce data in a standard ASCII form that can be read by various software packages for analysis of the data, to include Microsoft™ Excel.
- 1.14 Unit shall include a durable carrying case that houses the unit, cables, and documentation.
- 1.15 Unit shall include one (1) set of operation instructions, in English.

2.0 General:

- 2.01 Shall be capable of coming with optional software to analyze data for the data types listed in 1.10 above.
- 2.01 The unit shall be warranted by the manufacturer, from the date of receipt, to be free of defects of material or workmanship for a period of one (1) year.