VEHICLE COUNTER/CLASSIFIERS SPECIFICATIONS

Counter/classifiers purchased under this requisition must conform to the following specifications.

Power Source and Requirements:
Power: 6 volt sealed gel cell battery, rechargeable with 110-volt adapter or solar panel. Battery should maintain counter for a period of 3-4 weeks without recharging (depending on traffic volumes). Unit will be equipped with a solar panel of adequate size to maintain battery indefinitely in normal sun conditions. Solar panel must be encased and completely environmentally sealed in a high impact resistant, UV stabilized plastic. The solar panel shall be mounted on top of the classifier and recessed to protect the panel. The units will be designed to allow stacking without damaging or scratching the solar panel.

Field Set-up and Monitoring:
Unit must contain a built-in 16-key keypad and LCD display with full alphanumerical capability for set up and monitoring.

Unit must be fully compatible with windows based laptop for set-up, monitoring, and retrieving data.

Memory:
Units will be equipped with a minimum of 1 MB of usable standard internal, battery backed RAM and must be capable of storing a minimum of fifteen days of two (2) lanes of FHWA classification Scheme "F" data collected in one (1) hour intervals.

Inputs:
Four air switches for road tubes.

Count Rate:
20 vehicles per second - per channel.

Software:
Vendor must furnish user friendly software capable of operating on a standard computer operating under the Windows XP environment. The software must have conversion and editing capabilities to output the data in a format that satisfies department and FHWA needs. Software upgrades will be provided for a period of two years at no additional cost to the State of Alabama Department of Transportation. Software must be supplied to operate laptop computers for retrieving data from counters and transferring data.

Field units must have an onboard real time clock calendar. The clock must be a twenty-four (24) hour time clock with hours, minutes and seconds. The calendar must output the day, month and year, compensating for leap year. The recording interval must be selectable between 1 and 1440 minutes.

Specifications for Requisition Number G15 -

Accuracy:
The units selected for purchase under this requisition shall be capable of accurately recording and classifying a minimum of ninety (90) percent of the vehicles being monitored and must meet the accuracy requirements for the HPMS and WIM programs as specified by the FHWA. Unit must be capable of classifying two lanes of traffic simultaneously, either traveling in same, or opposite directions. This accuracy will be checked and verified by comparing the data collected with manual counts and counts made with our existing equipment. If the accuracy level required is not met within three months of delivery and the training period, the State of Alabama retains the right to cancel the purchase order, return the units to the vendor and purchase units from the next lowest bidder.

Configuration:
Must be capable of storing each lane count in an individual bin, or all lanes in a single bin. Must be able to view input activity via onboard display and/or laptop computer as it is being binned. Counters must be capable of storing setup information, site number, configuration and count interval. Site ID must provide at least ten digits for site identification. The classification table should allow a minimum of 15 user definable bins, with 24 vehicle types, with FHWA Scheme "F" as default. Units must be capable of collecting selectable multiple studies in one setup (i.e., speed, classification, volume, gap, headway), with option to select individual or a combination of reports.

The following parameters must be capable of being changed, viewed or reset via an onboard keyboard and a laptop computer:

A. Time & date
B. Classification table
C. Site number
D. Configuration
E. Type of files required
F. Sensor calibration
G. Recording interval
H. Battery status

Vendor must supply one (1) cable for each eight (8) (or fraction of) units to connect unit to laptop computer and a 110 volt AC battery charging device for each counter. Each counter to include a quality lock (Master #1 or equal, all keyed alike). 12 operating manuals and 4 software manuals will be supplied.

The counter will be housed in a sturdy, seamless, rustproof, watertight case with a locking lid and an integral handle for carrying and securing. Vent holes for battery case must be situated so that water cannot enter case.

Training at our facilities on the use of the supplied equipment and software shall be provided for a maximum of three (3) days. The cost of this training is to be included in the price of the bid units.

Units must be furnished with all schematics and service information.

Vendor must supply a list of current users with phone numbers and a test unit with operating and software manuals and any required software, cables and accessories needed to operate the equipment for a 30-day evaluation.

Ship these items to: **Traffic Counter Repair Shop**
Alabama Department of Transportation
Transportation Planning Bureau
ATTN: Charles W. Turney
511 Traffic Operations Drive
Montgomery, Al. 36110

Specifications for Requisition Number G15 – 003683 (Line 2)

VEHICLE COUNTER/CLASSIFIERS SPECIFICATIONS

Counter/classifiers purchased under this requisition must conform to the following specifications.

Power Source and Requirements:
Power: 6 volt sealed gel cell battery, rechargeable with 110-volt adapter or solar panel. Battery should maintain counter for a period of 3-4 weeks without recharging (depending on traffic volumes). Unit will be equipped with a solar panel of adequate size to maintain battery indefinitely in normal sun conditions. Solar panel must be encased and completely environmentally sealed in a high impact resistant, UV stabilized plastic. The solar panel shall be mounted on top of the classifier and recessed to protect the panel. The units will be designed to allow stacking without damaging or scratching the solar panel.

Field Set-up and Monitoring:
Unit must contain a built-in key keypad and LCD display with full alphanumerical capability for set up and monitoring.

Unit must be fully compatible with windows based laptop for set-up, monitoring, and retrieving data.

Memory:
Units will be equipped with a minimum of 1 MB of usable standard internal, battery backed RAM and must be capable of storing a minimum of fifteen days of two (2) lanes of FHWA classification Scheme "F" and speed data collected in one (1) hour intervals.

Inputs:
Four air switches for road tubes.
Eight loop input w/capability to add additional loop board.

Count Rate:
20 vehicles per second per channel.

Software:
Vendor must furnish user friendly software capable of operating on a standard computer operating under the Windows XP environment. The software must have conversion and editing capabilities to output the data in a format that satisfies department and FHWA needs. Software upgrades will be provided for a period of two years at no additional cost to the State of Alabama Department of Transportation. Software must be supplied to operate laptop computers for retrieving data from counters and transferring data.

Field units must have an onboard real time clock calendar. The clock must be a twenty-four (24) hour time clock with hours, minutes and seconds. The calendar must output the day, month and year, compensating for leap year. The recording interval must be selectable between 1 and 1440 minutes.

Specifications for Requisition Number G15 – 003683 (Line 2)

Accuracy:
The units selected for purchase under this requisition shall be capable of accurately recording and classifying a minimum of ninety (90) percent of the vehicles being monitored and must meet the accuracy requirements for the HPMS and WIM programs as specified by the FHWA. Unit must be capable of classifying two lanes of traffic simultaneously, either traveling in same, or opposite directions. This accuracy will be checked and verified by comparing the data collected with manual counts and counts made with our existing equipment. If the accuracy level required is not met within three months of delivery and the training period, the State of Alabama retains the right to cancel the purchase order, return the units to the vendor and purchase units from the next lowest bidder.

Configuration & Setup
Unit must be capable of storing each channel in an individual bin, or summating different combinations of channels into separate bins. Must be able to summate channels without having to set up each lane individually. Must be able to view all input activity simultaneously via onboard display and/or laptop computer in real time. Counters must be capable of storing setup information, site number, configuration and count interval. Site ID must provide at least ten digits for site identification. The classification table should allow a minimum of 15 user definable bins, with 24 vehicle types, with FHWA Scheme "F" as default. Units must be capable of collecting selectable multiple studies in one setup (i.e., speed, classification, volume, gap, headway), with option to select individual or a combination of reports.

The following parameters must be capable of being changed, viewed or reset via an onboard keyboard or a laptop computer:

A. Time & date
B. Classification table
C. Site number
D. Configuration
E. Type of files required
F. Sensor calibration
G. Recording interval
H. Battery status
I. Loop Sensitivity & Hysteresis

Vendor must supply one (1) cable for each eight (8) (or fraction of) units to connect unit to laptop computer, one cable per loop input for each counter, and a 110 volt AC battery charging device for each counter. Each counter to include a quality lock (Master #1 or equal, all keyed alike). 12 operating manuals and 4 software manuals will be supplied.

The counter will be housed in a sturdy, seamless, rustproof, watertight case with a locking lid and an integral handle for carrying and securing. Vent holes for battery case must be situated so that water cannot enter case.

Training at our facilities on the use of the supplied equipment and software shall be provided for a maximum of three (3) days. The cost of this training is to be included in the price of the bid units.

Units must be furnished with all schematics and service information.

Vendor must supply a list of current users with phone numbers and a test unit with operating and software manuals and any required software, cables and accessories needed to operate the equipment for a 30-day evaluation .
Ship these items to: **Traffic Counter Repair Shop**
Alabama Department of Transportation
Transportation Planning Bureau
ATTN: Charles W. Turney
511 Traffic Operations Drive
Montgomery, Al. 36110