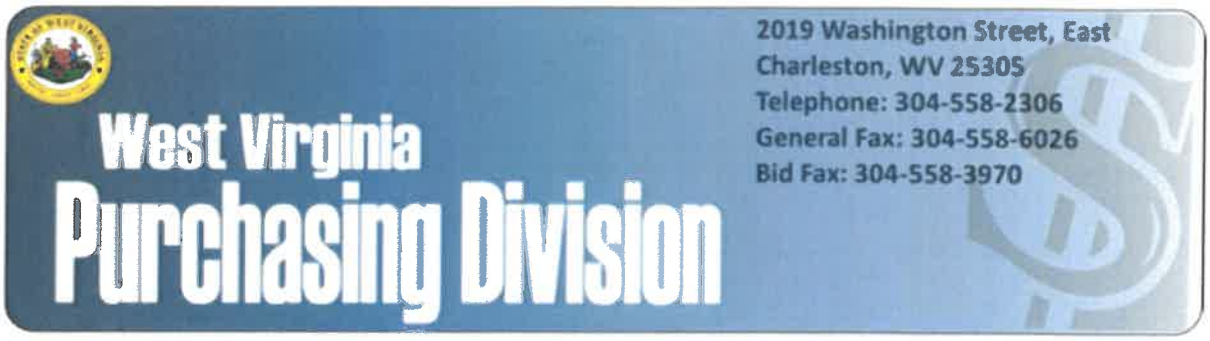
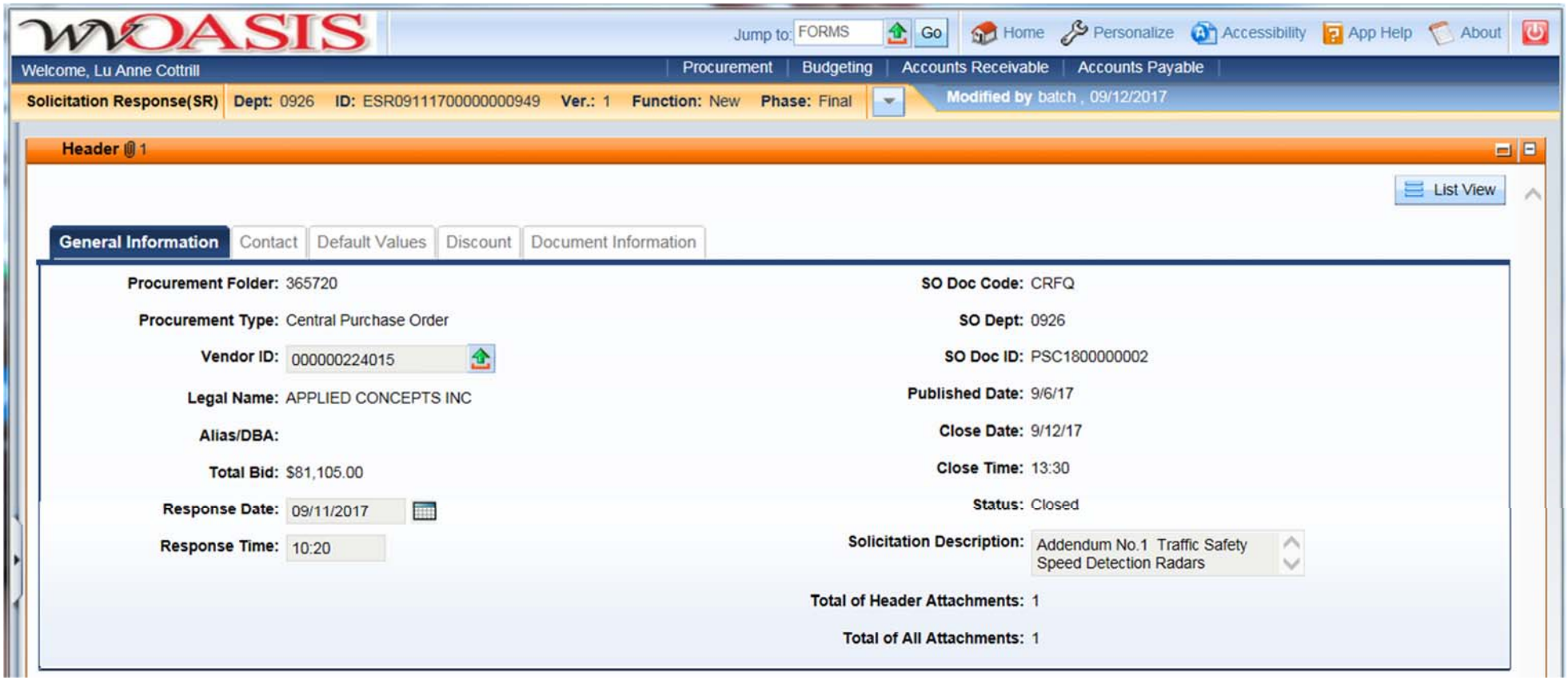


The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.


WVOASIS
Jump to: FORMS Go
Home
Personalize
Accessibility
App Help
About
Welcome, Lu Anne Cottrill
Procurement
Budgeting
Accounts Receivable
Accounts Payable
Solicitation Response(SR) Dept: 0926 ID: ESR09111700000000949 Ver.: 1 Function: New Phase: Final
Modified by batch , 09/12/2017
Header 1
List View
General Information
Contact
Default Values
Discount
Document Information
Procurement Folder: 365720
Procurement Type: Central Purchase Order
Vendor ID: 000000224015
Legal Name: APPLIED CONCEPTS INC
Alias/DBA:
Total Bid: $81,105.00
Response Date: 09/11/2017
Response Time: 10:20
SO Doc Code: CRFQ
SO Dept: 0926
SO Doc ID: PSC1800000002
Published Date: 9/6/17
Close Date: 9/12/17
Close Time: 13:30
Status: Closed
Solicitation Description: Addendum No.1 Traffic Safety Speed Detection Radars
Total of Header Attachments: 1
Total of All Attachments: 1

Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Solicitation Response

Proc Folder : 365720

Solicitation Description : Addendum No.1 Traffic Safety Speed Detection Radars

Proc Type : Central Purchase Order

Date issued	Solicitation Closes	Solicitation Response	Version
	2017-09-12 13:30:00	SR 0926 ESR09111700000000949	1

VENDOR

000000224015

APPLIED CONCEPTS INC

Solicitation Number: CRFQ 0926 PSC1800000002

Total Bid : $81,105.00 **Response Date:** 2017-09-11 **Response Time:** 10:20:10

Comments:

FOR INFORMATION CONTACT THE BUYER

Melissa Pettrey

(304) 558-0094
melissa.k.pettrey@wv.gov

Signature on File **FEIN #** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Thirty-nine new speed detection radars. Contract Item 3.1.1	39.00000	EA	$1,875.000000	$73,125.00

Comm Code	Manufacturer	Specification	Model #
49211810			

Extended Description :

Contract Item 3.1.1
Thirty-nine, new, Kustom Signals Directional Golden Eagle II, or equal, Speed Detection Radars.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Four new speed detection lasers. Contract Item 3.1.2	4.00000	EA	$1,995.000000	$7,980.00

Comm Code	Manufacturer	Specification	Model #
49211810			

Extended Description :

Contract Item 3.1.2
Four, new, Kustom Signals ProLaser IV, or equal, Laser Speed Detection Device. Hand held

applied concepts, inc.

State of West Virginia | Request for Quote

Traffic Safety Speed Detection Radars | CRFQ 0926 PSC1800000002

Applied Concepts, Inc. proudly submits this proposal for traffic safety speed detection radars and lasers.

STALKER

Applied Concepts, Inc. | Stalker Radar | 855 E Collins Blvd | Richardson, Texas 75081 | 1-800-STALKER | 972.398.3780

September 8, 2017

Melissa Pettrey
Department of Administration, Purchasing Division
2019 Washington Street east
Charleston, WV 25305-0130

RE: **State of West Virginia CRFQ 0926 PSC1800000002 Traffic Safety Speed Detection Radars**

Dear Melissa,

Applied Concepts, Inc/dba Stalker Radar is proud to submit this proposal with alternative products that exceed the general requirements set forth in this CRFQ. Stalker's radar and laser product's functionality exceeds anything else on the market, our pricing is competitive and respectful of tight public budgets. We look forward to your evaluation of our products and services and we are confident that you will be more than pleased with the results.

Stalker radars are used by more State Agencies than all other radar brands combined. The Stalker DSR is a high performance, direction sensing radar that is so efficient and makes the officer's job much easier. The Stalker DSR & Lidar XLR either meet or exceed the general requirements listed. Noted differences between the Kustom Golden Eagle II and the Stalker DSR:

3.1.1 Kustom Signals Directional Golden Eagle II Radar

3.1.1.3 Radar unit shall have bright red light emitting diode (LED) indicators/displays that automatically adjust to ambient lighting conditions.

Stalker's DSR display has yellow (Target Speed), red (Faster Speed) and green (Patrol Speed) LEDs to help the officer differentiate the speeds quickly and lock them accordingly.

3.1.1.13 Radar must use K-band radio frequency with a minimum operating radio frequency of 24.150 MHz + .1 MHz; and Ka Band radio frequency with a minimum operating radio frequency of 33.4-36.0 MHz + .1 MHz. Radar shall have automatic frequency sensing.

Stalker's DSR achieves the industry's longest range with their Ka-band antennas by digitizing the Doppler audio signal at the antenna and using a high-speed digital communication link to transmit data between the antenna and the counting unit...a Stalker patented feature.

Traditional two-piece radar units send a low-level Doppler audio signal from the antenna to the counting unit for processing and speed display. This method is susceptible to noise induced by the auto ignition and 2-way radio transmissions, which results in reduced range and increased potential for false targets. By using a digital signal, we've eliminated these false signals and improved the reliability of our products.

3.1.1.18 Vendor shall provide a minimum one-year warranty on all radar and antenna components/equipment.

Stalker's DSR comes with a 3-year warranty on the radar unit, display and antennas and a 1-year on cables & remote.

3.1.2 Kustom Signals ProLaser IV, or equal, speed detection laser device (handheld).

3.1.2.3 Each laser shall have a rechargeable battery pack and charger and USB charging cables.

Stalker's Lidar XLR comes with a rechargeable battery and an AC desktop charger. It provides ample power to last two or more shifts on a single charge, plus, the battery can be expected to last through more than 500 charging cycles. This is a much more economical charging method than AA batteries.

3.1.2.8 Laser shall have poor weather and obstruction mode; laser shall be able to determine targets through glass.

Stalker's Lidar XLR not only has an auto obstruction mode (allowing tracking through trees, fencing, signage, bushes, and poles to name a few). The inclement weather mode allows the unit to work in rain, snow, blowing dust, and fog. This mode also increases the distance when using the XLR through the front windshield of the patrol car.

The XLR also has a School Zone/Construction Zone Mode. The operator sets a far boundary and near boundary and the XLR will ignore vehicles outside of that zone and will give the operator speed and distance of a given vehicle within those parameters.

Lastly, police officers love the Anti-Jamming capability of the Stalker Lidar XLR. It has software that not only detects but ignores jamming pulses and continues to provide accurate speed tracking. Jammers are being used without any worries about false or no readings.

3.1.2.13 Vendor shall provide a minimum one-year warranty on all laser components/equipment.

Stalker's Lidar XLR comes with a standard 2-year warranty.

Please accept this bid submittal and let me know if you have any questions. Your completed forms are attached as well as the Stalker DSR and Lidar XLR product brochures and spec sheets. I look forward to hearing your decision.

Warm regards,

Jan Achilles

Jan Achilles
Sales Administrator
jana@a-concept.com

STATE OF WEST VIRGINIA FORMS

	PAGE NO.
Request for Quotation, 27 Miscellaneous	4 - 6
Designated Contact, Certification and Signature	7
Exhibit A - Pricing	8
Purchasing Affidavit	9
Addendum Acknowledgement Form	10

Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Request for Quotation
27 — Miscellaneous

Proc Folder: 365720

Doc Description: Traffic Safety Speed Detection Radars

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2017-09-01	2017-09-12 13:30:00	CRFQ 0926 PSC1800000002	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Name, Address and Telephone Number:

Applied Concepts, Inc
855 E Collins Blvd
Richardson, TX 75081
800-752-5537 / 972-398-3780

FOR INFORMATION CONTACT THE BUYER

Melissa Pettrey
(304) 558-0094
melissa.k.pettrey@wv.gov

Signature X Jan Achilles **FEIN #** 75-1544925 **DATE** 9/8/2017

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMAITON:

Request for Quotation

The West Virginia Purchasing Division is soliciting bids on behalf of the Public Service Commission (PSC) to establish a contract for the one-time purchase of traffic safety speed detection radars per the attached bid requirements, specifications and terms and conditions.

INVOICE TO		SHIP TO	
ADMINISTRATION PUBLIC SERVICE COMMISSION 201 BROOKS ST CHARLESTON WV25301 US		RECEIVING/TRANSPORTATION BUILDING PUBLIC SERVICE COMMISSION 1116 QUARRIER ST CHARLESTON WV 25301 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Thirty-nine new speed detection radars. Contract Item 3.1.1	39.00000	EA	$1875	$73,125

Comm Code	Manufacturer	Specification	Model #
49211810	Applied Concepts, Inc	2Ka Direction Sensing Radar	806-0022-00

Extended Description :

Contract Item 3.1.1
Thirty-nine, new, Kustom Signals Directional Golden Eagle II, or equal, Speed Detection Radars.

INVOICE TO		SHIP TO	
ADMINISTRATION PUBLIC SERVICE COMMISSION 201 BROOKS ST CHARLESTON WV25301 US		RECEIVING/TRANSPORTATION BUILDING PUBLIC SERVICE COMMISSION 1116 QUARRIER ST CHARLESTON WV 25301 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	Four new speed detection lasers. Contract Item 3.1.2	4.00000	EA	$1995.	$7,980

Comm Code	Manufacturer	Specification	Model #
49211810	Applied Concepts, Inc	Lidar XLR Speed Detection Lasers	808-5025-00

Extended Description :

Contract Item 3.1.2
Four, new, Kustom Signals ProLaser IV, or equal, Laser Speed Detection Device. Hand held

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Jan Achilles ja

(Name, Title)

Jan Achilles, Sales Administrator

(Printed Name and Title)

855 E Collins Blvd, Richardson, TX 75081

(Address)

972-801-4891 / 972-398-3781-Fax

(Phone Number) / (Fax Number)

jana@a-concepts.com

(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Applied Concepts, Inc / dba Stalker Radar

(Company)

Jan Achilles ja Sales Administrator

(Authorized Signature) (Representative Name, Title)

Jan Achilles, Sales Administrator

(Printed Name and Title of Authorized Representative)

9-8-2017

(Date)

972-801-4891 / 972-398-3781 Fax

(Phone Number) (Fax Number)

Exhibit A

Traffic Safety Speed Detection Radars

Item No. & Description	Brand Name	Model #	Unit of Measure	Unit Cost	QTY.	Extended Cost
1. 3.1.1 Speed Detection Radar	Stalker Radar DSR	806-0022-00	Each	$1875	39	$ 73,125.
2. 3.1.2 Speed detection laser device (handheld)	Stalker Radar Lidar XLR	808-5025-00	Each	$1995	4	$ 7,980.
			TOTAL BID AMOUNT (Lines 1 + 2)			$ 81,105.

Vendor should not alter pricing page and should fill out pricing page as it. The addition of alterations to the pricing page and/or addition of commodities other than those listed on the pricing page online or as an attachment, will result in disqualificaiton of bid submittal.

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL OTHER CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Applied Concepts, Inc / dba Stalker Radar

Authorized Signature: [signature] Date: 9-8-2017

State of Texas

County of Dallas, to-wit:

Taken, subscribed, and sworn to before me this 8th day of September, 20 17.

My Commission expires Oct. 4, 20 17.

AFFIX SEAL HERE

NOTARY PUBLIC [signature]

SHIRLENE GILMARTIN
My Commission Expires
October 4, 2017

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: **PSC1800000002**

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

☒ Addendum No. 1	☐ Addendum No. 6
☐ Addendum No. 2	☐ Addendum No. 7
☐ Addendum No. 3	☐ Addendum No. 8
☐ Addendum No. 4	☐ Addendum No. 9
☐ Addendum No. 5	☐ Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Applied Concepts, Inc / dba Stalker Radar
Company

Authorized Signature **Jan Achilles**

September 8, 2017
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

STALKER RADAR INFORMATION

	PAGE NO.
Stalker DSR Radar Brochure	12 - 13
DSR Radar Spec Sheet	14 - 16
Stalker Lidar XLR Brochure	17 - 18
Lidar XLR Spec Sheet	19

Stalker DSR | Single-Zone Directional Radar

STALKER DSR

High Performance, Superior Range, with Moving Direction Sensing Radar Technology

By displaying both strongest and faster targets simultaneously, the Stalker DSR can monitor faster vehicles passing larger vehicles and display the speed of <u>both</u> targets simultaneously.

- Direction-Sensing Technology
- Automatic Same-Lane Tracking - Simple and Accurate
- Stationary Direction Control
- Strongest and Faster Targets Displayed
- Strongest and Faster Targets Can Be Locked
- Voice Verification of Antenna, Mode, and Direction
- Plug-n-Play Vehicle Speed Sensing (VSS)
- True Waterproof Ka-Band Antennas
- ***Stalker - Used by more State Agencies than all other radar brands combined***

BUY AMERICAN ACT COMPLIANT

STALKER®

Power to Enforce.

STALKER DSR

Automatic Same-Direction Operation

Many conventional radars force the operator to visually estimate and manually input faster or slower targets each time in order to calculate readings. With direction sensing antennas, the Stalker DSR is able to automatically determine if same-direction vehicles are closing or going away from the radar. This allows the DSR to automatically measure same-direction traffic speeds as simply and accurately as it does with opposite-direction traffic.

Highly Effective Stationary Operation

The direction sensing ability of the Stalker DSR allows the operator to select a specific direction of traffic to monitor. The DSR can measure closing targets while automatically ignoring vehicles that are going away–even if the target moving away is closer than a distant closing target. The Stalker DSR makes stationary operation very useful and highly effective in all locations.

Detachable Display Unit

The tiny display module can be easily separated from the counting unit using an optional cable. This allows for nearly limitless installation options.

True Doppler Audio

The audio Doppler tone in opposite-lane operation is generated from the target's actual speed (not closure speed) so the tone always correlates directly to the target's speed – regardless of patrol speed.

Vehicle Speed Sensing (VSS) Standard

Connecting the radar to power and VSS has never been simpler. Plug the Stalker CAN/VSS cable into the car's OBD II diagnostic port located under the dash on the driver's side, and you're done. No cables to splice, wire harnesses to find, just simple plug-n-play.

Provides Voice Verification of the Antenna, Radar Mode, and Direction

Whenever a target is locked, the Stalker DSR audibly tells the operator WHICH antenna is in use (front or rear), what MODE the radar is operating in (moving or stationary), and the DIRECTION (opposite or same direction) the vehicle is traveling. This added step assists the operator in ensuring accuracy every time.

Serial Port

The serial RS-232 port can interface with most video cameras, computers, remote readouts, printers, and the Stalker CopTrax In-Car Video System.

CopTrax from STALKER

The Most Sophisticated Digital, Ka-Band Antenna for Faster target acquisition and more dynamic range.

The Stalker DSR achieves the industry's longest range by digitizing the Doppler audio signal at the antenna and using a high-speed digital communication link to transmit data between the antenna and the counting unit.

Traditional two-piece radar units send a low-level Doppler audio signal from the antenna to the counting unit for processing and speed display. This method is susceptible to noise induced by the auto ignition and 2-way radio transmissions, which results in reduced range and increased potential for false targets.

By using a digital signal, we've eliminated these false signals and improved the reliability of our products.

Strongest or Faster Target Locking is Available Through Remote Control

The infrared cordless remote moves all controls into the palm of the operator's hand. After experiencing the convenience and ergonomic sensibility of the Stalker Omnidirectional and backlit cordless remote, operator will ever want to return to corded or faceplate controls.

Now, in addition to Stronger target locking, Faster target locking has been added.

Optional Waterproof Motorcycle Components

The Stalker DSR shares the optional waterproof motorcycle components with the Stalker 2X. Durable, accurate products for continuous duty in the worst conditions.

See StalkerRadar.com for a complete listing of products and pricing.

stalkerRadar.com

STALKER®

Power to Enforce.

applied concepts, inc.
2609 Technology Drive ■ Plano, Texas 75074
972.398.3780 ■ Fax 972.398.3781

ISO 9001:2008 STALKER

006-0328-00 Rev G

800-STALKER

STALKER® ENHANCED DUAL DSR SPECIFICATIONS

General Specifications

Type:	Dual Antenna Direction Sensing Moving/Stationary Doppler Radar
Operating Frequency:	33.4 GHz - 36.0 GHz (Ka-Band)
Stability:	±100 MHz (Ka-Band)
Power Requirements: (With 2 Antennas)	10.0 to 16.4 VDC. (currents are typical at 13.6 VDC): XMIT with all displays on: 1.28A XMIT with all displays off: 1.08A XMIT with moving target: 1.15A XMIT with no target: 1.11A Standby with no target: .8A
Environmental:	-30° to +70° C, 90% Relative Humidity Operating -40° to +85° C, non-operating
Display:	Triple (red, green, amber) 3-digit Light Emitting Diode (LED) for target, lock, and patrol, plus LED icons
Mechanical:	**Display Unit** Weight - 0.5 lb. Size - 1.65" Height, 1.05" Depth, and 5.50" Width
	Counting unit Weight - 1.6 lbs. Size - 1.65" Height, 3.90" Depth, and 5.50" Width
	Antenna Weight - 1.4 lbs. Size - 2.50" Dia. X 4.75" Length
	Remote Weight - 0.4 lb. Size - 1.00" Height, 6.20" Length, and 2.25" Width
Accuracy:	+1, -2 mph stationary, ±2 mph moving +1.6 km/h, –3.2 km/h stationary, ±3.2 km/h moving
Automatic Self-Test:	Performed every 10 minutes
Stationary Speed Range:	12 mph to 200 mph Standard or 2 mph to 200 mph (set-up menu selectable) **Stationary Fastest Speed** - Same speed range as stationary speed
Moving Speed Range:	**Patrol speed** – Once acquired, will track to 150 mph. Acquistion speed is selectable with P.S. 5/20 key. 5 in patrol window for patrol speed acquistion speeds of 5 to 90 mph; 10 in patrol window for patrol speed acquistion speeds of 10 to 90 mph; 20 in patrol window for patrol speed acquistion speeds of 20 to 90 mph
	Opposite lane target speed – 200 mph Max closing For 5 mph patrol speed: 20 mph to 195 mph; For 70 mph patrol speed: 35 mph to 130 mph. **Opposite lane Fastest Speed** – Same speed range as opposite lane speed
	Same lane target speed – Related to patrol speed: ±70% of patrol speed within 5 mph of patrol speed. For 50 mph patrol speed: 15 → 45 mph and 55 → 85 mph. Same lane patrol speed must be greater than 15 mph

Microwave Specifications

Antenna:	Conical horn with corrective lens
Polarization:	Circular
3 db Beam width:	12° ±1°
Microwave Source:	Gunn-Effect diode
Antenna Receiver Type:	Two Direct Conversion Homodyne receivers using four low-noise Schottky barrier mixer diodes
Power Output:	10 mW minimum 25 mW nominal 50 mW maximum
Power Density:	2 mW/cm² maximum at 5 cm from lens

Display Messages

PASS:	**PASS** spelled out in display with a 4-beep "happy" tone indicates the unit has just passed self-test.
FAIL:	**FAIL** spelled out in display with a 15-beep tone indicates a circuit malfunction has been detected, in which case speed readings are inhibited. Remove the unit from service and repair. **FAIL** will remain on the display until reset by being powered off.
[ ], SC, SA, or S_:	Indicates the radar mode of operation in the patrol speed window. [ ] or a speed display in the patrol window indicates moving mode radar operation. **SC** indicates stationary operation with display of closing targets only. **SA** indicates stationary operation with display of targets proceeding away from the radar unit. **S_** is a mode for stationary operation which allows the display of targets in both directions.

SEn 1, SEn 2, SEn 3 or SEn 4:	**SEn 1** thru **SEn 4** is used to indicate the current range (sensitivity) setting . **SEn 1** is minimum; **SEn 4** is maximum. Opposite lane sensitivity is independent of same lane sensitivity. They are separately set.
5 or 20:	**5, 10,** or **20** spelled out in the patrol window indicates the low-end patrol speed is set to either 5 mph, 10 mph, or 20 mph
Aud 0, Aud 1, Aud 2, Aud 3, or Aud 4:	**Aud 0** thru **Aud 4** spelled out on the display unit indicates the current speaker volume setting. **Aud 0** is off; **Aud 4** is loudest.
b 0, b 1, b 2, or b 3:	These symbols are spelled out in the Patrol Speed display during the time that the audio number (Aud 3) is shown in the Target and Lock displays. The **b** number indicates the beep volume and is accessed by using the **P.S. BLANK** key.
U 0, u 1, u 2, or u 3	These symbols are spelled out in the Patrol Speed display during the time that the audio number (Aud 3) is shown in the Target and Lock displays. The **u** number, when displayed, indicates the state of the voice volume and is accessed by using the **SQL** key.
bri 1, bri 2 bri 3, bri 4, bri 5, or bri 6:	Used to indicate display brightness. **bri 1** is the dimmest; **bri 6** is the brightest.
Hot:	The display flashes **Hot** and powers down when the internal temperature exceeds specifications. Automatically resumes operating when the temperature drops.
rFI:	**rFI** is displayed in the Target window indicating the presence of an interfering signal. Operation is inhibited during an **rFI** indication.
Ulo:	**U Lo** is displayed in the Target window when the input voltage falls below approximately 8 volts. Operation is inhibited, but normal operation will resume automatically when the input voltage is restored to a normal voltage (>9.0 volts).

Remote Control Functions

STRONG LOCK/REL	The **STRONG LOCK/REL** key alternates between the lock and the release functions for the strong target. **LOCK** is used to transfer the contents of the target window to the lock window. **REL** clears the locked contents of the lock window and the patrol window. During lock, the patrol window will lock the present patrol speed and the **LOCK** icon will light. The target window and Doppler audio remain active after lock.
ANT:	Used to switch between the front and rear antenna. The **FRONT** or **REAR** icon will light. A 1-beep tone corresponds to the front antenna while a 2-beep tone corresponds to the rear antenna. The counting unit can sense the presence or absence of either antenna.
XMIT/HOLD:	Toggles between xmit and hold (standby). The **XMIT** icon will light.
MOV/STA:	Sequences between Moving mode and three stationary modes of operation: targets closing only, targets away only and targets in either direction.
SAME/OPP:	The **SAME/OPP** key is used to alternate between same lane moving mode and opposite lane moving mode. The **SAME** icon toggles on and off to indicate same lane mode.
FAST LOCK/REL	The **FAST LOCK/REL** key alternates between the lock and the release functions for the fast target. **LOCK** is used to lock the contents of the fast window and **REL** clears the locked contents of the fast window. During fast lock, both the **FAST** icon and the **LOCK** icon will light and the patrol window will lock the present patrol speed. The target window and Doppler audio remain active after locking.
STOPWATCH MODE:	Toggles the unit from radar mode to stopwatch mode and back again.
S/S:	In Stopwatch Mode, the S/S (or START/STOP) key is used to start and stop the electronic timing of the target vehicle as it enters and exits the speed measurement zone.
100:	In stopwatch mode, this key can be used to change the timing distance in 100 yard increments.
10:	In stopwatch mode, this key can be used to change the timing distance in 10 yard increments.
1:	In stopwatch mode, this key can be used to change the timing distance in 1 yard increments.
SEn:	Used to adjust the range (sensitivity) at any time. Maximum sensitivity is **SEn 4**; minimum sensitivity is **SEn 1**. Opposite lane sensitivity is independent of same lane sensitivity. They are separately set.
SQL:	The **SQL** key toggles the squelch override off and on. In the normal (off) position, audio will only be heard when a target is being tracked. When the Doppler audio menu is displayed, this key can be used to change the voice volume.
PS 5/20:	Used to select a low-end patrol speed of either 5 mph, 10 mph, or 20 mph. For example: **5** in patrol window for patrol speed acquisition of 5 to 90 mph **10** in patrol window for patrol speed acquistion speeds of 10 to 90 mph; **20** in patrol window for patrol speed acquisition of 20 to 90 mph
SELF TEST:	In radar operation, performs a complete self-test on display/counting unit and the selected antenna. The display unit shows speeds of **10, 35,** and **65**; temperature inside the display/counting unit in °F (e.g., **110 °F**); and input battery voltage (e.g., **bAt 13.8**); followed by **"PASS"** and a 4-beep "happy" tone or **"FAIL"** and a 15-beep tone. At the end of a successful test, the **FORK** icon is lit on the display to allow a measurement of non-directional speeds such as that produced by a tuning fork.
(((▶	Used to adjust the volume of the Doppler audio up or down. **Aud 0** is off; **Aud 4** is loudest.

P.S. BLANK:	In radar operation, this is a three function key. Used to re-acquire patrol speed. Also, blanks the patrol speed after a target speed and patrol speed are locked. Pressing the **P.S. Blank** key again restores the blanked speed. When the Doppler audio menu is displayed, this key can is used to change the beep volume.
	Dual function key. A single depression of the key activates the keyboard backlight for six (6) seconds. Two rapid depressions of the key activates the display brightness control. Additional depressions of the key toggles the display unit's brightness from bri 1 (low) to bri 6 (high).

Stalker XLR | Long Range LIDAR

The Stalker XLR is the smallest and lightest LIDAR in the industry, with superior range, fast target acquisition and advanced tracking.

The Stalker X-Series LIDAR packs the industry's most advanced technology into the industry's smallest package. Plus, the new C-Thru Mode gives the unit the ability to track moving vehicles through obstructions, school and construction zones, and in the worst weather conditions.

- Small and Lightweight
- Fastest acquisition time
- Industry-leading range and accuracy
- Removable, high capacity, Li-Ion rechargeable battery handle
- Ergonomic, water resistant design
- Speed *and* distance in Heads-Up Display
- Advanced Tracking with C-Thru Technology
- Optional Data Logging, Following-Too-Close, and Bluetooth technology

High powered optics. Polymer housing is impact and water resistant.

Removable, high capacity battery handle - power for several shifts.

Small. Light. Powerful. Stalker.

BUY AMERICAN ACT

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Power to Enforce.

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The Stalker X-Series LIDAR are the smallest and lightest hand-held, gun-type lasers on the market today. At a mere 2.3 lbs. including removable/rechargeable battery handle, the X-Series may be lightest of all the hand-helds, but it's no lightweight.

XLR

The new snap-in Li-ion battery handle provides ample power to last two or more shifts. Plus, the battery can be expected to last through more than 500 charging cycles.

Target acquisition is 1/3 second. The X-Series Long Range (XLR) is the best choice for targets as far as 4,000+ feet away.

Exclusive XLR Features:

Clear line of sight is no longer necessary!

C-Thru TECHNOLOGY

- **C-Thru Technology**
  Stalker LIDAR XLR's C-Thru Technology enables the LIDAR to track targets despite the presence of trees, leaves, bushes, utility poles, and other obstructions between it and the target.
- **Auto Obstruction Mode**
  Using C-Thru Technology, the operator can take a position where previously – because of a fence, trees, signage, etc. – continuous tracking of a target was impossible.

Advanced Features:

- **School Zone / Construction Zone Mode**
  The X-Series can be set to track vehicles only within an operator-defined area, such as a school zone or construction zone. The operator sets a far boundary and near boundary and the X-Series will ignore vehicles outside of that zone.
- **Inclement Weather / Obstruction Mode**
  The X-Series units have, as standard, a Inclement Weather/Obstruction Mode which allows the unit to work in rain, snow, blowing dust, fog, as well as through fences, tree branches, etc. This also increases the operating distance when using the X-Series LIDARs through the front windshield of the patrol car.
- **Anti-Jamming Capability**
  The X-Series LIDARs now have software that not only detects but ignores jamming pulses and continues to provide accurate speed tracking. Jammers are being used without any worries about false or no readings.
- **Shoots Through Windshields**
  In normal operation, the X-Series is unaffected when shooting through the windshield or side windows of the patrol vehicle.

Optional Features:

- **Bluetooth - NEW**
  The XLR can connect with peripherals such as printers or speed display signs. In the client mode, it allows the XLR to connect to a PC for serial data transfers or use with the Data Logging feature.
- **Data Logging - NEW**
  Capturing and logging speed and time data is as easy as releasing the trigger. Storing up to 3,000 data sets in non-volatile memory, the data is either captured automatically or only when accepted by the operator.
- **Following-Too-Close - NEW**
  Easily set up, the XLR automatically compensates for cosine error. Taking readings of two vehicles inside a 3-second window calculates the time a following vehicle will take to reach the current position of the car in front.

Specifications

Dimensions:	6.8" Height, 4.7" Length, 4.7" Width (22.6 cm Height, 11.8 cm Length, 11.9 cm Width)
Weight:	Including Battery Handle - 2.3 lbs (1.04 kg)
Housing:	High impact resistant polymer housing
Environmental:	-22° to +140° F, operating (-30° to 60°C) -40° to +185° F, non-operating (-40° to 85°C)
Humidity Protection:	+99° F, (37°C) 90% Relative Humidity
Battery Life:	Typically 500+ charge cycles
Battery Charge:	Li-ion battery: Approx. 2 - 3 shifts
Type:	Handheld LIDAR offering Tracking mode, Single-Shot mode, and Time/Distance mode.
Acquisition Time:	1/3 second
Nominal Range	Minimum: - Range mode < 10' (< 3 m) Speed mode 50 feet (15.2 m) Normal: 2500 feet (762 m) approaching Targets Maximum: > 4,000 feet (1219 m)
Range Accuracy:	±6" (0.15 m)
Speed Measure:	1 mph to 299 mph (2 km/h to 481 km/h, 2 knots to 344 knots)
Speed Accuracy:	±1 mph (±1 km/h, ±1 knots)
Eye Safety:	FDA/CDRH CLASS 1 Laser Device (Eyesafe)

Lowest Cost of Ownership

Stalker products are priced competitively and built to last. But should your X-Series LIDAR ever need repair, you can count on a fair price based on your LIDAR's specific needs, not a one-charge-fixes-all blanket price. That's what we mean when we say that Stalker has the lowest cost of ownership in the industry.

Holsters


BMW


Honda


Harley Davidson

STALKER® Power to Enforce.

applied concepts, inc.
2609 Technology Drive ■ Plano, Texas 75074
972.398.3780 ■ Fax 972.398.3781

006-0817-00 Rev F

800-STALKER

STALKER® LIDAR XLR SPECIFICATIONS

Operational:

Type:	Handheld Lidar offering Tracking mode, Single Shot mode, and Time/Distance mode.
Acquisition Time:	Less than .4 second
Nominal Range :	Minimum < 5 feet (1.5 meters) Normal = 2500 feet (762 meters) approaching targets Maximum > 4000 feet (1200 meters)
Range Accuracy:	less than or equal to 1 foot (0.3 meter)
Speed Measure:	2 mph to 299 mph (1.6 km/h to 481 km/h; 1.7 to 259.6 knots)
Speed Accuracy:	+1 mph, –1 mph (+2.0 km/h, –2.0 km/h; +0.86, -0.86 knots)
Test/Alignment mode:	Enter using the TEST key and the Trigger. Used to test HUD alignment using audio tone.
Metric, Knots Operation:	Setup menu selectable
Lidar trigger modes:	Setup menu selectable: 1. Constant trigger depression for constant XMIT 2. Separate trigger depressions to start/stop XMIT
Time/Dist. trigger mode:	Separate trigger depressions when target enters and exits speed zone
Inclement Weather mode:	Suppresses target returns from targets closer than approximately 250 ft to reduce interference from rain, fog, and snow
Remote Trigger:	Remote trigger signal available through I/O Port
Target Speed Tone:	Variable audio tone corresponding to target speed. A fast target generates a higher tone and a slow target generates a lower tone
Target Return Tone:	No tone when beam is off target; tone repetition increases as beam moves into target and return signal quality increases
I/O Signals:	Ext. Trigger, Tx, Rx, Gnd, and Switched battery voltage.

Physical

Dimensions:	8.9" Height, 4.7" Length, and 4.7" Width 22.6 cm Height, 11.9 cm Length, 11.9 cm Width
Weight:	Including Battery Handle - 2.3 lbs (1.05 kg)
Housing:	Injection molded plastic case
Shoulder Stock:	Accessory shoulder stock is available
Input Voltage Range:	**Battery Handle:** 6.4V to 9.0V @ 400 ma. Nominal **Cigarette Cable:** 6.4V to 16.0V @ 400ma. Nominal Low voltage inhibit activates between 6.4V and 6.8V
Low Voltage Inhibit:	Inhibits all readings while input voltage is below the low voltage inhibit level
Low Voltage Standby:	After 10 seconds of inactivity (unit not transmitting), power consumption is reduced to 63% of nominal
Input Power Protection:	Solid state automatically resettable fuse
Environmental:	-30 to +60 C, operating-40 to +85 C, non-operating
Humidity Protection:	+37 C, 90% Relative Humidity, 8 hours minimum, operating
Additional Resistance:	Dust, water, and impact
EMI:	RFI icon indicates that the unit is in a high EMI field. No false readings when the unit is subjected to Electromagnetic Interference from vehicle alternator, ignition, air conditioner/heater motor, windshield wiper motor, Police FM transceiver, or CB Radio
¼ "x 20 Tripod Mounts:	Attachable bracket provides tripod mounting in normal orientation.
I/O Connector:	12-pin I/O connector on lower left side of case.

Transmitter & Receiver:

Operating Wavelength:	905 ± 10 nm Peak @ 25° C
Spectral Bandwidth:	5 ± 3 nm FWHM
Laser Type:	MOCVD InGaAs Stacked Array Pulsed Laser Diode
Eye Safety:	FDA/CDRH CLASS 1 Laser Device (Rated Eyesafe)
Pwr. Output:	50uW maximum average power. 385 nJ maximum pulse energy (meets FDA/CDRH regulations)
Pulse Width:	< 30 nsec.
Pulse Repetition Rate:	Fixed, 130 Hz (±0.1 % at 8.40 VDC)
Beam Divergence:	< 3 ± 0.5 mrad FWHM
Optical Design Type:	Bistatic (dual aperture)

HUD

Targeting:	Illuminated Open □, keyboard adjustable intensity.
Range and Speed Data:	Range: Four 7-Segment Digits (8888) Speed: Three 7-Segment Digits (±888) Range and Speed have keyboard adjustable intensity

PANEL

Display:	8-Character (7-segment) with ± LCD display with keyboard controlled backlight
Display Clear:	Activates prior to new measurement (with depression of trigger)
Power-On Self Test:	Electronic test, timing accuracy verified, and all display elements illuminated. Errors indicated by beep code.
Speed Display Lock:	Manual control (auto lock of speed and range with release of trigger)
Controls:	Silicon Rubber Keypad (with LED backlight) operating mechanical dome switches

SWITCH DEFINITION

TRIGGER: **(Lidar mode)**	Setup Menu Selectable: 1. Constant trigger depression for constant Xmit 2. Separate trigger depressions start/stop Xmit
TRIGGER: **(time/dist mode)**	Separate trigger depressions when target enters and exits speed zone
PWR:	Toggles main power ON/OFF
TEST:	Performs a complete self-test
HUD Light:	Toggles the HUD intensity from low to high through six levels when pressed
SPEED/RANGE:	Used to select Tracking mode, Single Shot mode, Inclement Weather mode, and to toggle between SPEED only, RANGE only, and simultaneous SPEED and RANGE display. Used to exit from MIN, MAX, and TIME/DIST modes.
PANEL LIGHT:	Toggles both the LCD backlight and the keyboard backlight ON and OFF
AUDIO:	Used to adjust the volume of the speaker in 4 steps
TIME/DIST:	Selects TIME/DIST mode
MAX:	Used in TIME/DIST mode to display/update maximum range
MIN:	Used in TIME/DIST mode to display/update minimum range

DISPLAY MESSAGES

Enn:	This message indicates that a measurement error has occurred
PASS:	This message (with "happy tone") indicates that a self-test has successfully completed