

scanning, etc.

A. Scanner Unit

Quantity: 01 No

- 01. Scanning Object : Cars, Vans, Trucks, Buses, etc.
- 02. Speed Range : Min. Range: 0-20 kmph.
- 03. Scanning Technology : Area Scan.
- 04. Image Type : Grey Scale.
- 05. Illumination : Infrared Illumination Technology.
- 06. Sensor : IR Sensors.
- 07. Cover :
 - a. Material : Stainless Steel Heavy Duty Cover.
 - b. Handles : Handles for easy carry.
 - c. Load Capacity : Can withstand minimum 50N without structural damage.
- 08. Cabinet :
 - a. Material : Stainless Steel Cabinet.
 - b. Holes : Holes for cabling/ ducting.
- 09. Magnet Detection System : The system shall capable of detecting magnetically attached IED's and/or contraband.
 - a. Sensor : Magnetic Field Sensors.
 - b. Strength : Measured strength of magnetic field with which IED's and/or contraband attached magnetically.
 - c. Scanning Speed : 100 to 200 Hz or better.
 - d. Vehicle Speed : 0 to 20 Km/h.
(Min. Range)
 - e. Sensitivity : 0.04 mT or better.
- 10. Operating Temperature : -10 degrees to +55 degrees or better.
- 11. Ingress Protection : IP 67 or better.

B. Automatic Number Plate Recognition

Quantity: 01 No

- 01. System : The system shall perform OCR (Optical Character Recognition) of the license plate characters.
- 02. Camera Resolution : Min. 2 MP.
- 03. Day Night Type : IR cut filter with auto switch.
- 04. Vehicle Speed : Min. Range: 0-20 kmph.
- 05. Camera Power : PoE.
- 06. Other Accessories : All power supply adapter, mounting pole, fabrication of base of pole, mounting bracket shall be under the scope of supplier.
- 07. Ingress Protection : Min. IP 67.

Quantity: 01 No

C. Speed Bump

- 01. Dimension : Min. (L x W x H) 144 inch x 12 inch x 2 inch.
- 02. Drainage : Bottom Channels for Water Drainage.
- 03. Weight Capacity : Min. 44,000 lbs per axle.
- 04. Visibility : Reflector on bump for visibility at night.

D. Monitoring Workstation

Quantity: 01 No

01. Processor : Core I 7, six-core processor.
02. Operating System : Window/ Linux.
03. RAM : 8 GB DDR3 or better.
04. Hard Disk : Min. 2 TB SSD.
05. Graphics : NVidia/ RTX/ AMD (Minimum 2 GB).
06. Monitoring Display : Min. 19.5 inch.
08. Other Items :
 - a. Keyboard.
 - b. Mouse.
 - c. Speaker.
 - d. Computer Table with Chair.

E. Software

01. Real Time Data View : The scanner should give a real-time output of all the data simultaneously, i.e. the composite image, license plate display shall be displayed on the monitor instantaneously.
02. Automatic Threat Detection : The system shall have the capability of automatically highlight the potential threat object after scanning.
03. Automatic Comparison : The software compares the current scan image to a previous scan image of the same vehicle, stored under the same license plate. It indicates the differences between the 2 images with a block indicator.
04. Magnet Detection System : The system shall capable of detecting magnetically attached IED's and/ or contraband.
05. Automatic License Plate Recognition : The system shall include automatic license plate recognition.
06. Alarm Activation : The system shall activate alarm on event such as automatic threat detection, automatic comparison error, magnet detected, etc.
07. Software Front End : Microsoft.Net/ Linux.
08. Software Back End : The back end database should be on latest version of SQL server.
09. License : All required software to operate and control the under vehicle scanning system shall be licensed with lifetime validity.
10. Storage and Data History : The system shall capable of storing 300,000+ scanning data including license plate number. Required hardware and software shall be supplied for viewing historical data. Advance searching algorithm shall be incorporated for date wise, vehicle license plate number wise, event wise, etc. historical data.
11. Data Export : It shall be possible to export current and historical scanning data including license plate number to the user's portable storage device such as pen drive, hard disk drive, etc. The format shall be jpg, png and/ or pdf.

F. Control Cabinet/ Junction Box

Quantity: 01 No

01. Material : Aluminum.
02. Thickness : Min. 4 mm.
03. Lock System : Door lock with handle.
04. Size in mm(L x W x H) : Min. 850 x 600 x 220
05. Cable Organization : All cable inside the junction box shall be well organized through DIN connector block.
06. Accessories : All required two pole circuit breaker, cable connector block, proper earthing of the system shall be under the scope of supplier.

G. Cable

Quantity: 100 meter

- 01 Cable Type : All cable shall be armoured type.
- 02 Cable arrangement : All above ground cable shall be well organize through proper cable ducting.

H. Buzzer

Quantity: 01 No

01. Sound Level : Adjustable from 80 dB to 100 dB
02. Function : Generate sound for event such as automatic comparison alarm,

- automatic threat detection alarm, magnetically attached IED/contraband alarm.
03. Available Power Supply : Available power supply at ERL end is 220 V AC. The required power supply for the alarm system shall be supplied by the supplier.
04. Other Items : Other accessories such as cable, ducting, mounting, etc. shall be under the scope of supplier.

I. Other Items

01. Online UPS : Online UPS with minimum 01 hour backup time shall be supplied for full system operation during power failure event. Quantity: 01 No
02. Networking : All required network switch, Ethernet cable, etc. shall be supplied for proper system operation. Quantity: 01 Lot
03. Printer : Color Laser Printer (Model: HP Color LaserJet Professional CP5225dn or equivalent). Quantity: 01 No
04. Adapter, Power Supply : All required power adapter, power supply/ converter shall be under the scope of supplier. ERL will provide 220V AC power supply only. Quantity: 01 Lot

J. Manufacturing Country : USA/ UK/ Japan/ Germany/ France/ Netherland

K. Training: : Successful bidder shall provide training on operation, troubleshooting and maintenance for ERL personnel (Training Duration: Day long).