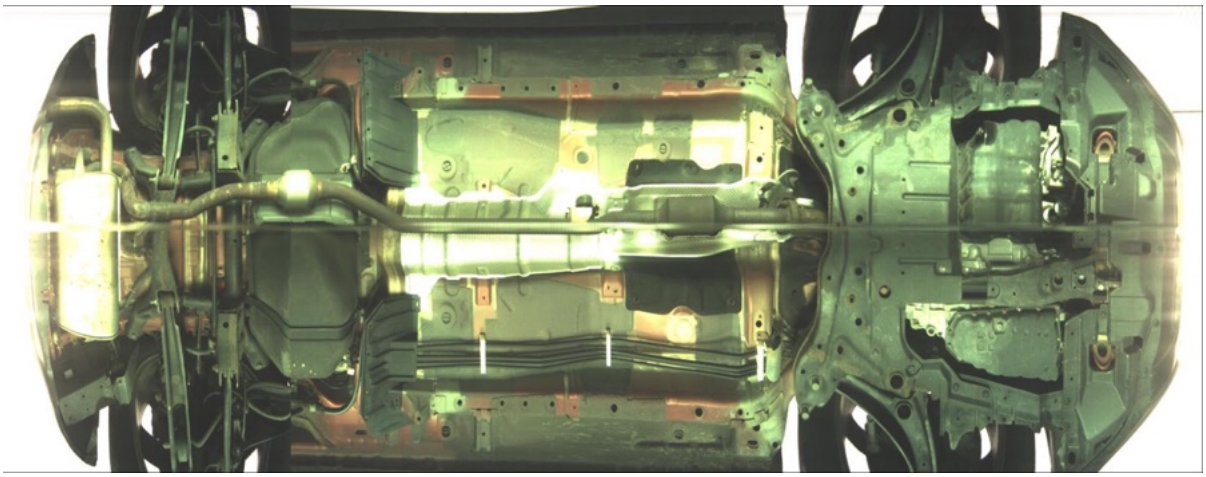
CPAS UVIS SYSTEM

CPAS Under Vehicle Inspection Systems

Models: 2101, 3101, 4101, 2001, 3001, 4001

TECHNICAL SPECIFICATION PACKAGE

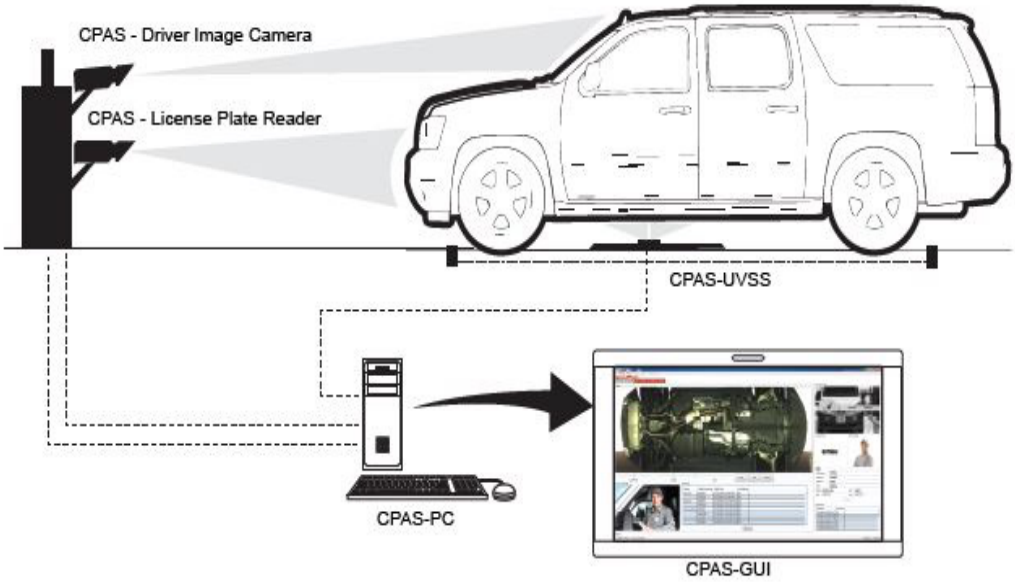


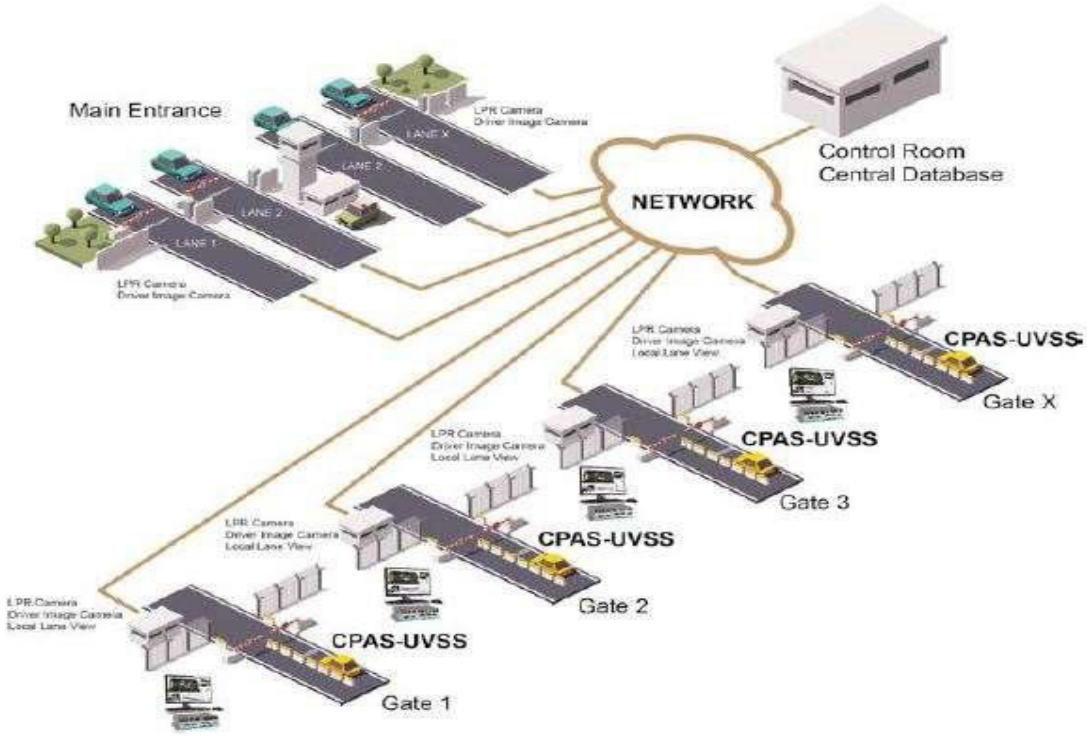
TECHNICAL, ARCHITECTUAL & ENGINEERING SPECIFICATIONS

FOR COMM PORT TECHNOLOGIES CPAS MODEL FAMILY OF UNDER VEHICLE INSPECTION SYSTEMS (UVIS) AND RELATED SUB-SYSTEMS

COMM PORT TECHNOLOGIES INC.
1 CORPORATE DR STE F
CRANBURY, NJ 08512
TEL: +1-732-738-8780
EMAIL: INFO@COMM-PORT.COM
WWW.COMM-PORT.COM

CPAS-UVSS Complete system with LPR / ACDM / Image Camera





All technical specifications /description are subject to change without notice

CPAS PRIMARY SYSTEM PART NUMBERS AND DESCRIPTIONS

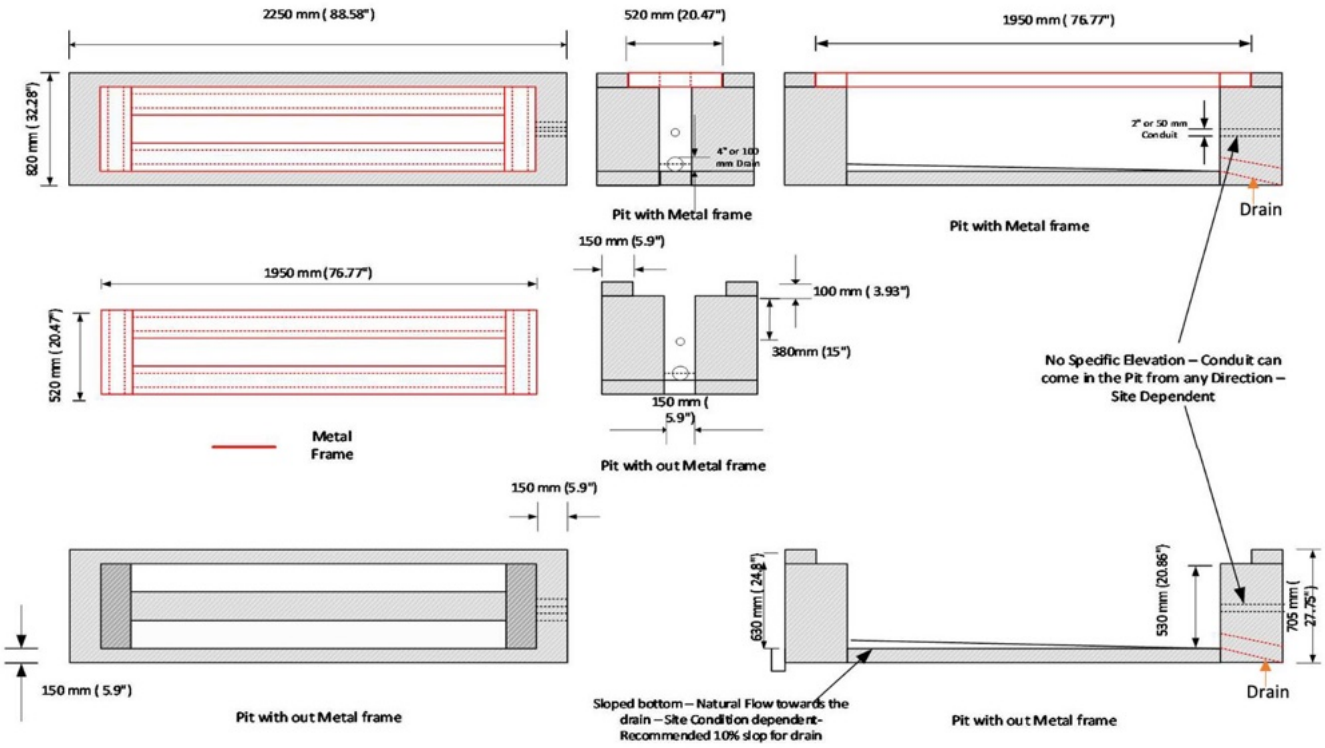
Model	Description
CPAS 2101	High Res. Color, Area Scan, 500 FPS, Vehicle Speed to 30mph (45 Km/h), Weight to 78 tons per Axle, IP68, -40°F to +165°F (-40°C to +74°C)
CPAS 3101	High Res. Color, Area Scan, 700 FPS, Vehicle Speed to 40mph (65 Km/h), Weight to 78 tons per Axle, IP68, -40°F to +165°F (-40°C to +74°C)
CPAS 4101	High Res. Color, Area Scan, 500 FPS, Vehicle Speed to 45mph (75 Km/h), Weight to 78 tons per Axle, IP68, -40°F to +165°F (-40°C to +74°C)
CPAS 2001	High Res.Monochrome Area Scan, 500 FPS, Vehicle Speed to 30mph (45 Km/h), Weight to 78 tons per Axle, IP68, -40°F to +165°F (-40°C to +74°C)
CPAS 3001	High Res.Monochrome Area Scan, 500 FPS, Vehicle Speed to 40mph (65 Km/h), Weight to 78 tons per Axle, IP68, -40°F to +165°F (-40°C to +74°C)
CPAS 4001	High Res.Monochrome Area Scan, 500 FPS, Vehicle Speed to 45mph (75 Km/h), Weight to 78 tons per Axle, IP68, -40°F to +165°F (-40°C to +74°C)
CPAS PC WRKSTN	Windows 10 Pro, 64 Bit OS, 12th Gen Intel Core i7, 16GB, DDR5 Memory with 1TB HD. LAN connections, LPR, Driver Image and CPAS CommsBox. Full MS SQL. USB, HDMI, Gigabit Ethernet, SD CARD, Graphics Card, and Integrated Audio Card.
CPAS COMMBOX	Weatherproof Outdoor Communications Box includes Two Power Supplies, IP Based Digital Data Acquisition Module, Relays, Loop Controller, Power Cables. Spare Rail Mounting, Vented, Sunshield, IP67
CPAS LPR	Auto Set-up, Glare Free and Shadow Free, ONVIF, Dual IR to 50m - Parity Pulsing, Light Sensing, 24VAC, IP67, Cable through Mounting, HDR, 30FPS, Advanced Vison Features for accurate High Speed LPR capture. Cable Concealed Bracket. (ARH VIDAR HDx)
CPAS DIC	8MP-IP, 12VDC, 98'IR Range, IR Pulsing, IP66, ONVIF, 30FPS, D-WDR,2D/3D-DNR. Defogging, PoE Compatible, Cable Concealed Bracket 6-22mm

A&E SPECIFICATIONS

1. The Under vehicle inspection system (CPAS UVIS) shall be provided with complete system that will consists of the latest technology in Area Scan cameras, Monitors, Industrial Strength PC with no fans and a sealed body with a minimum configuration of a Pentium i7, 12th Gen., 16 GB Ram, DDR5, 1 TB HDD, 1 TB SSD, 6 USB Ports, 1 HDMI Port, 1 Display Port, , , , Port and 1 Digital Audio connection, related cabling, LPR Camera, Driver Image camera, LED Lighting arrangement , Relays, Data Acquisition module, Loop Detector Module ,metal framing for in ground , Outdoor NEMA rated Field installation box and the associated Power supplies.
2. The CPAS UVIS camera shall be suitable for day /night operation along with a minimum of 24" or 32" LCD monitor for viewing.
3. The CPAS UVIS shall have a capability of storing a minimum of 500,000 images or more if required.
4. The CPAS UVIS should be able to capture very high resolution & complete composite under body image of any vehicle passing over it, without the vehicle being required to be fully stopped, by using an Ultra high quality color AREA Scan camera.
5. The CPAS UVIS should be able to handle vehicles moving at different speeds ranging from 1 KMPH up to 75 KMPH, while the composite image so captured by the system should be automatically and dynamically adjusted according to the speed of the vehicle using multiple loop-based sensors.
6. The CPAS UVIS system should have a feature of dynamically and automatically adjusting the brightness and contrast of the system to ensure good quality images, irrespective of the different external lighting conditions.
7. The CPAS UVIS system should have a facility to view the composite image and video images, offline for all vehicles.
8. The CPAS UVIS system applications & operating software shall be based on open architecture. It shall have a user-friendly Graphical User Interface (GUI) with provision for multiple users logging of events and search facility.
9. The CPAS UVIS must have a feature to magnify the composite images (current and past), so as to facilitate a closer and zoom-up view of it.
10. The CPAS UVIS system must have a facility to take back-up of all the transactions to any usual backup / storage media and also should be able to print out reports.
11. The CPAS UVIS components should be enclosed in a suitable all-weather-proof housing.
12. The CPAS UVIS shall have an operating temperature of -40C to +74C
13. The CPAS UVIS complete civil installation structure should be suitably designed to withstand a total vehicle load up to 78-Tons, so as not to cause any accidental or physical damage to the unit.
14. The CPAS UVIS should have open protocol for integration with other security systems and also networking for any remote monitoring requirements.

15. The CPAS UVIS Unit shall have three options for speed frames. Viz. 500 FPS, 700 FPS and 900 FPS. This shall help the user determine upon site conditions for the allowable speed of the vehicles. 500 FPS will support a vehicle speed of the vehicle to go up to 45 KMPH, 700 FPS will support up to 65 KMPH and 900 FPS will support up to 75 KMPH.
16. The CPAS UVIS shall have an option for Monochrome or Color resolution.
17. THE CPAS UVIS shall have a minimum warranty of 1years on the system.
18. The CPAS UVIS shall have no limitation on Vehicle length.
19. The CPAS UVIS system shall be field replaceable.
20. The CPAS UVIS shall have capability of importing database from client's approved list to activate approved drivers' entries on campus along with LPR / vehicle details and images of drivers.
21. The CPAS UVIS shall have provision for different hierarchy for authorization for operating the system.
22. The CPAS UVIS shall have capability to dynamically adjust the image up to speed of 75 KMPH.
23. The CPAs UVIS shall use a Progressive Area Scan GigE IP Camera.
24. The CPAS UVIS shall have a frame rate of minimum 500 FPS up to a maximum of 900 FPS to support speeds of up to 75 KMPH.
25. The CPAS UVIS shall have a minimum resolution of 1920 x 1080 with a field of view of a least 145 Deg. at the Widest angles with ultra-low distortion using patented Linear Optical Technology® at a minimum of 5-megapixel resolution.
26. The CPAS UVIS camera shall be UL / CE and FCC certified.
27. The CPAS UVIS shall not use older generation of Line Scan technology.
28. The CPAS UVIS shall not require any additional auxiliary view cameras to view hard to see area of the undercarriage.
29. The CPAS UVIS system shall have provision to record and save Driver image of all Right-hand side or left-hand side driven vehicles.
30. The CPAS UVIS system should have LPR capabilities to record, identify and read plates from all countries, irrespective of fonts, language, and or formats. The displayed information should support the GUI on the screen as well as capability to print and save in different formats as per the users' needs.
31. The CPAS UVIS should be able to be supported online if required by user.
32. The CPAS UVIS should do automatic Anomaly detection.
33. The CPAS UVIS should utilize the latest in **ACDM** (Automatic Change Detection Module) technology.
34. The CPAS UVIS should utilize Advance Analyzation and Multiple Step Image Normalization to identify Anomalies.
35. The CPAS should do Comparison of Identical, Partially Dissimilar and Substantially Different comparison.
36. The CPAS ACDM module must be stable under Invariant Lighting, Invariant Contrast, and Invariant Brightness.
37. The CPAS Software shall contain an Adaptive Matrix Software module to allow for adjustment of triggers and timing of the CPAS Area Scan Camera and related components.

CPAS PIT DIMENSIONAL DRAWING



For Complete Drawing Package/ Installation instructions please contact your Comm Port representative.

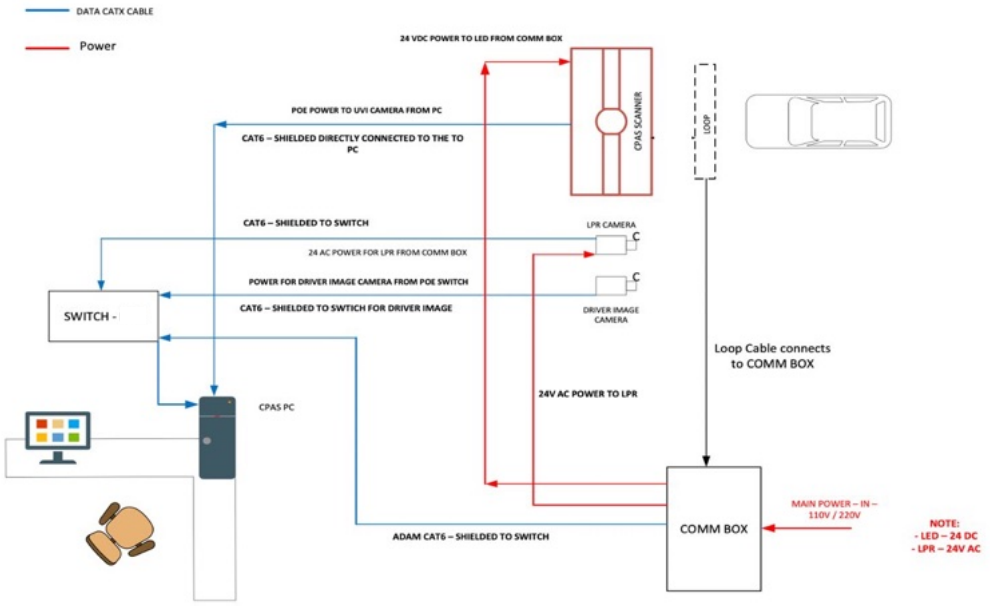
TYPICAL CPAS CIVIL WORK EFFORT

Per Lane	Hrs. Est	Workers	Type	Description
	8.00	2	EC/GC	Civil Work: Pit Excavation & Pour Concrete
	4.00	2	EC/Tech	Install Loop sensor
	8.00	2	EC/Tech	Wire and Conduit for LPR/CPAS/DI/CommBox (est. vary by site conditions)
	2.00	1	EC/Tech	Mount and Wire Comms Box
	1.00	1	EC/Tech	Install LPR
	1.00	1	EC/Tech	Install Driver Image
	1.00	1	EC/Tech	Install Head End PC/Monitor
	2.00	2	EC/Tech	Install CPAS Unit in Pit.
	2.00	2	EC/Tech	Final Connections
	2.00	1	Tech	Test

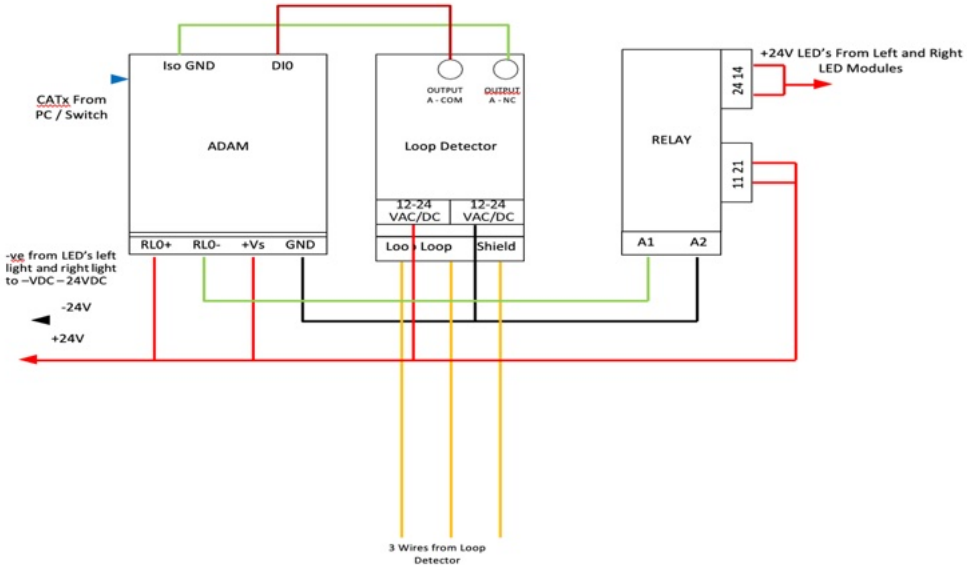
** Note: This schedule of effort estimate is a non-binding Manufacturers estimates only based on typical installations. It should only be used as a guideline. Actual estimates are the responsibility of the Dealer/Contractor. CommPort takes no responsibility for the accuracy of these or any other individual Site effort schedule estimates.*

ELECTRICAL CONNECTIONS

System Overview:



CommBox Connections:



Total System Draw for UPS Calculations: 1000W / 1200VA

LOOP DETECTION

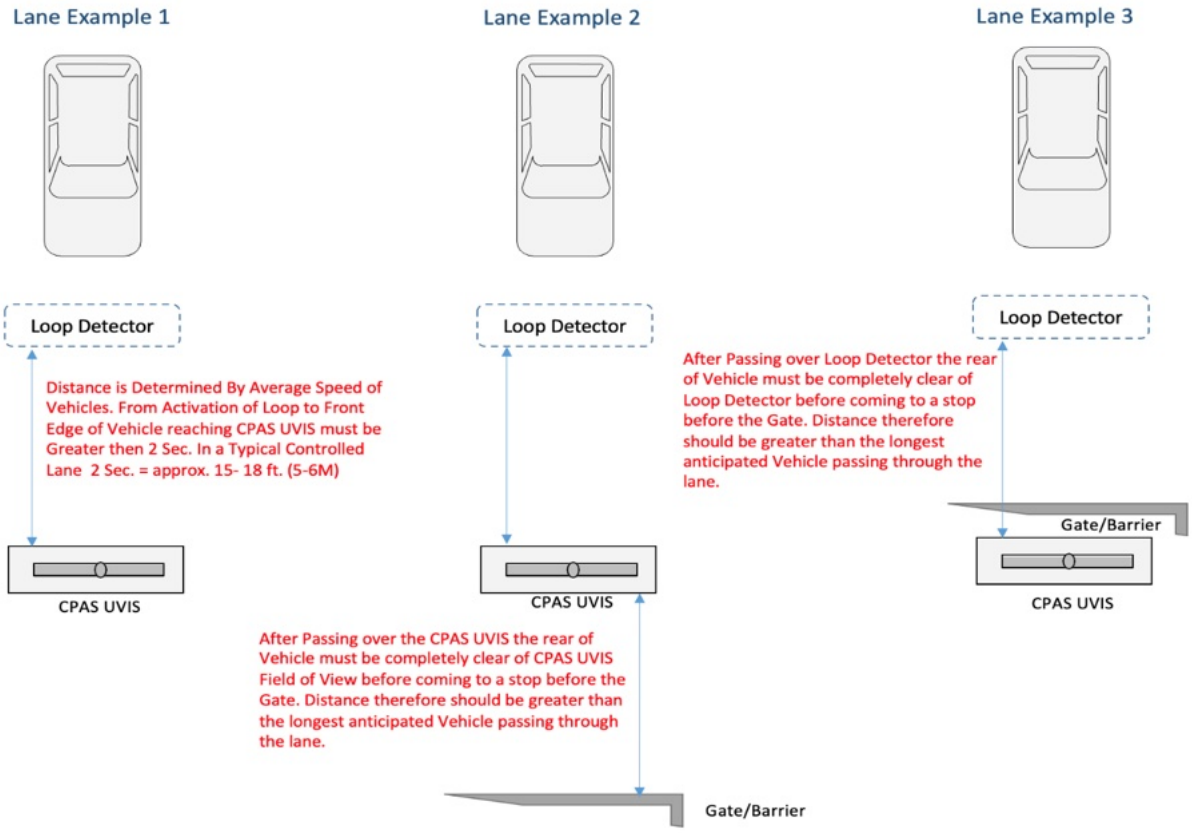
Understanding Loop Detector Placement:
The Criteria for the correct placement of a Loop Detector is more dependent on "Time" than of "Distance".
The CommPort CPAS UVIS requires a min of approx. 2 seconds from the time the Loop Detector is activated until the front of the Vehicle starts to pass over the CPAS UVIS scanner.

Explanation:
A vehicle passes over the loop detector and the Loop Detector is tripped, this activates the Loop Module in the CommBox to tell the CPAS UVIS to "wake up" (turn on the LED's) and tells the CPAS UVIS Area scan camera & Camera PC SW to start looking for the leading edge of a vehicle and be ready to scan. This whole process takes about a min. 2 seconds on average.
Therefore, if the average/ anticipated vehicle speed in the lane is slow enough to allow for a min. of 2 seconds of time between activating the loop sensor and the front of the vehicle arriving at the front edge of the CPAS UVIS scanner then you will have no issues if installed correctly.
If the anticipated speed of the Vehicles in the lane is determined to be faster and thus not allow for 2 seconds, then you would have to either find a way to reduce the vehicle speeds (i.e., Speed bump or other means) or increase the distance between the Loop Detector and the CPAS UVIS.

Field Loop Detector Cable:
CommPort supplies a preinstalled Loop Detector Module in every CPAS CommBox. Supply and Selection of The Loop Detector Cable is the responsibility of the Installer/Integrator for selection and procurement. This is due to several reasons including and not limited to:

- The uniqueness and variability in Design and Concept of Operations of every lane on a project.
- Differing Lane surfaces i.e., Concrete, Asphalt, Stone, Dirt, and climatic conditions
- Differing National, Regional, Local, and Site-Specific Regulations, Best Practices, and Ordinances.
- Preference or Decree of the Local Authority Having Jurisdiction (AHJ)

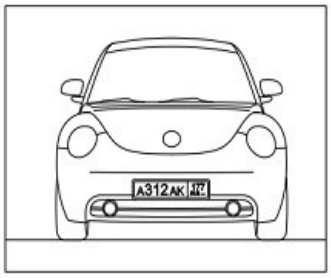
LOOP DETECTION LANE EXAMPLES

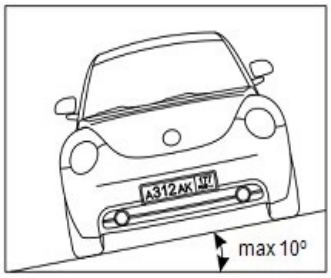


LPR BASIC GUIDELINES*

LPR Camera Rotational Angle:

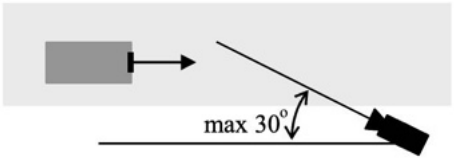
The camera must be mounted such that the horizontal lines in the image are parallel to the horizontal edges of the frame. The rotation of the image must not exceed 10 degrees. Wrong positioning may cause misrecognized vehicle license plate numbers.

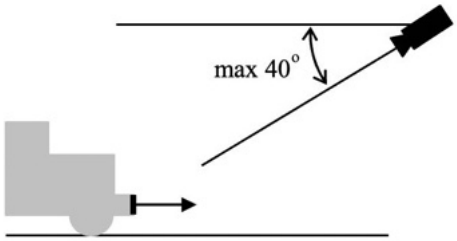




LPR Camera Inclination Angle:

The system is intended to detect and recognize license plates of vehicles moving towards or away from the camera. The corresponding horizontal and vertical angles should be within the ranges below (these depend on the plate format and image width).



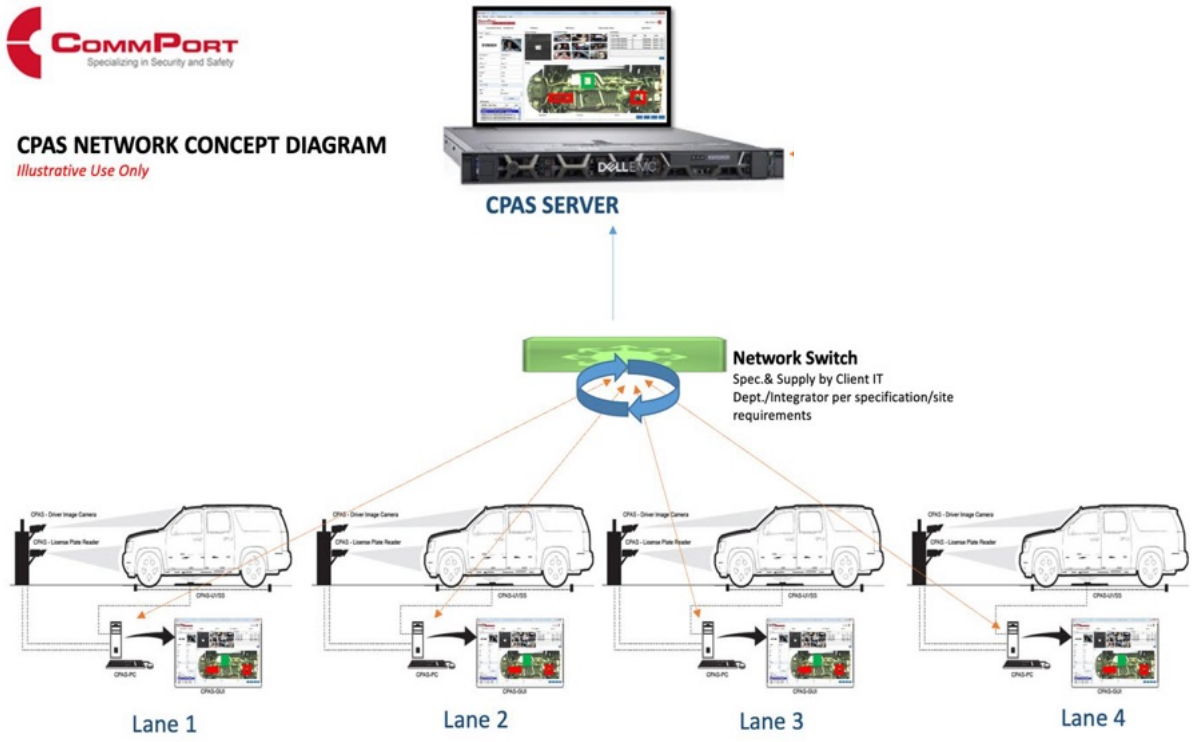


*Further guidance on LPR camera placement can be found in Comm Port's "LPR System Installation Detail Guide"

Please note: *Correct and usable LPR camera placement varies from site to site. All guidelines are considered general "best practices". Individual site conditional may vary, and it is the responsibility of the Dealer/Integrator/Engineer/Consultant to determine proper placement based on the site layout and customer concept of operations.*

NETWORK TOPOLOGY DIAGRAM

Typical Networked CPAS System Topology Diagram:



CPAS SYSTEM COMISSIONING

Installation Procedural Checklist:

1	Complete Civil Works Including Excavation of Pit, Laying of Conduit, Cable, and Drainage, if applicable
2	Fabricate concrete form, pour the concrete, and install the metal frame structure in the concrete as per the drawing and instructions provided by the manufacturer.
3	Install the brackets to hold UVSS scanner and LED light bars, ensuring CPAS UVIS Camera is installed in correct direction of traffic.
4	Install CPAS UVIS camera and LED light bars.
5	Install/Mount CPAS CommBox
6	install network and power cables and complete terminations
7	Install the Driver Image Camera and LPR as per manufacture recommendations
8	Install the Loop detector as per the manufacturer's recommendations
9	Make all the connections as per the wiring layout
10	Install the PC and monitor in a control room and make the final network connection to CommBox and to the CPAS scanning unit in the pit.

CPAS SYSTEM COMISSIONING

Testing Procedural Checklist:

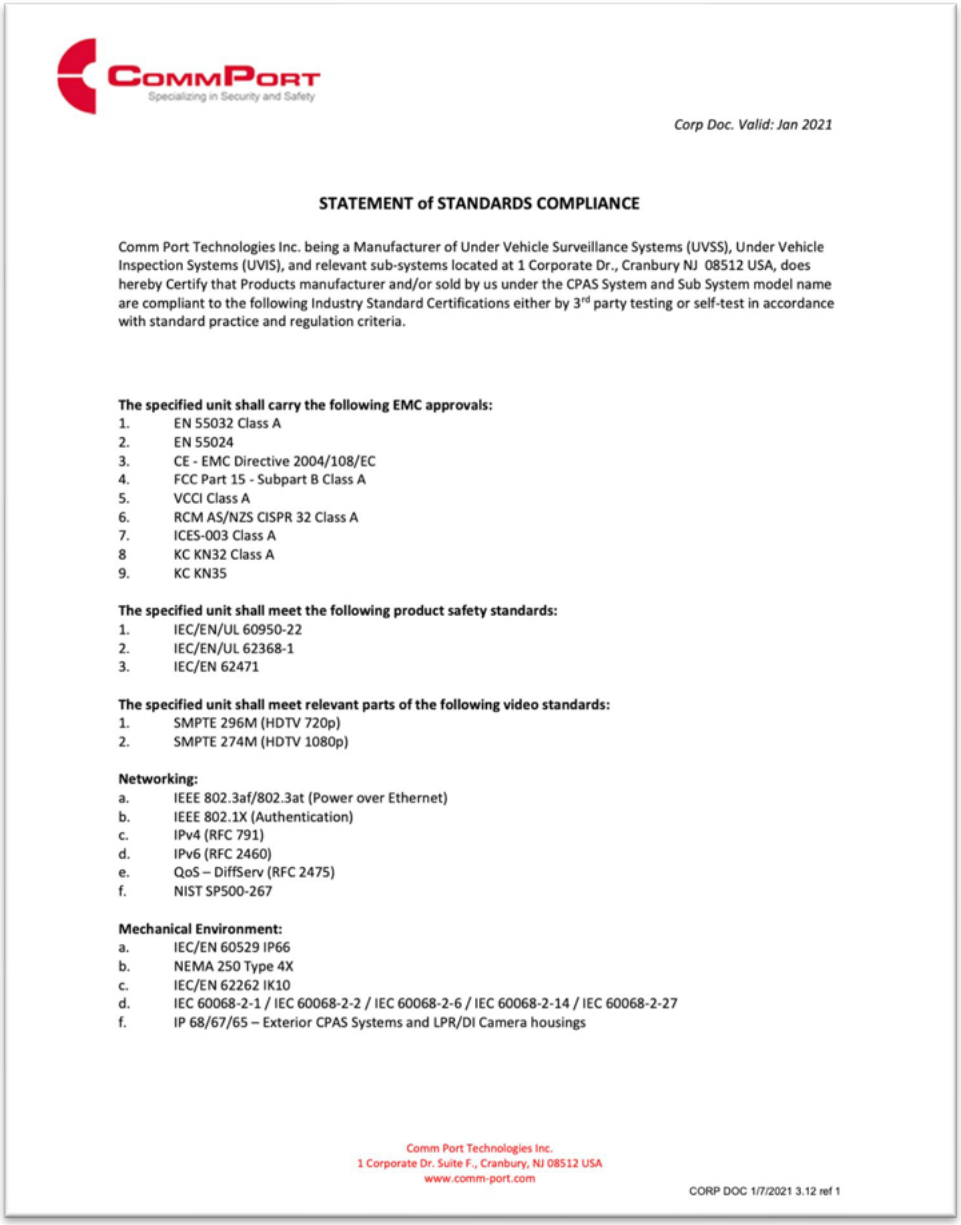
1	Power up the CommBox. Check status lights on the various modules.
2	Boot the PC login as an CPAS UVIS User
3	Start the CPAS UVIS application and wait for login
4	Login as Admin Name as admin and password as "Admin"
5	Check the devices status indicators
6	Loop Detector status change to active and then to connected
7	During loop activation check status lights go to "on" and then "off"
8	Check lights on CPAS scanner go to "on" and then "off"
9	LPR Status, UVIS Status and driver Camera Status all should show connected
10	Park a vehicle at a location where LPR is supposed to capture the LPR. From LPR live view on the PC adjust physical camera direction and angle, then the zoom and focus.
11	Park a vehicle at a location where Driver Camera is supposed to capture the Driver, Open the Driver camera live view on the PC. Adjust physical camera direction and angle, then the Zoom and focus.

CPAS SYSTEM COMISSIONING

Final Acceptance Test:

1	Loop Detector Status Connected /Active
2	LPR Status Connected
3	CPAS UVIS Status Connected
4	Driver Camera Status Connected
5	LED Light Status Off /On
6	Bring Vehicle on the Loop Light status on computer changes to "On" and holds "On" then goes "Off"
7	LED Lights turns "On" and holds "On" then goes "Off"
8	Conduct 5 x Vehicle complete scans and observe when vehicle comes on the detector loop UVIS lights comes on and when vehicle exits the scanner completely UVIS light turns off.
9	Ensure LPR, Driver images and Vehicle scanned image will appear on the computer screen for each scan
10	Confirm LPR number with time and date stamp as they appear in the database
11	Register two vehicles and run 3 x scans of each vehicle
12	Run the search for a particular LPR number and review the search results for correctness

CPAS STANDARDS



CommPort
Specializing in Security and Safety

Corp Doc. Valid: Jan 2021

STATEMENT of STANDARDS COMPLIANCE

Comm Port Technologies Inc. being a Manufacturer of Under Vehicle Surveillance Systems (UVSS), Under Vehicle Inspection Systems (UVIS), and relevant sub-systems located at 1 Corporate Dr., Cranbury NJ 08512 USA, does hereby Certify that Products manufacturer and/or sold by us under the CPAS System and Sub System model name are compliant to the following Industry Standard Certifications either by 3rd party testing or self-test in accordance with standard practice and regulation criteria.

The specified unit shall carry the following EMC approvals:

1. EN 55032 Class A
2. EN 55024
3. CE - EMC Directive 2004/108/EC
4. FCC Part 15 - Subpart B Class A
5. VCCI Class A
6. RCM AS/NZS CISPR 32 Class A
7. ICES-003 Class A
8 KC KN32 Class A
9. KC KN35

The specified unit shall meet the following product safety standards:

1. IEC/EN/UL 60950-22
2. IEC/EN/UL 62368-1
3. IEC/EN 62471

The specified unit shall meet relevant parts of the following video standards:

1. SMPTE 296M (HDTV 720p)
2. SMPTE 274M (HDTV 1080p)

Networking:

a. IEEE 802.3af/802.3at (Power over Ethernet)
b. IEEE 802.1X (Authentication)
c. IPv4 (RFC 791)
d. IPv6 (RFC 2460)
e. QoS – DiffServ (RFC 2475)
f. NIST SP500-267

Mechanical Environment:

a. IEC/EN 60529 IP66
b. NEMA 250 Type 4X
c. IEC/EN 62262 IK10
d. IEC 60068-2-1 / IEC 60068-2-2 / IEC 60068-2-6 / IEC 60068-2-14 / IEC 60068-2-27
f. IP 68/67/65 – Exterior CPAS Systems and LPR/DI Camera housings

Comm Port Technologies Inc.
1 Corporate Dr. Suite F., Cranbury, NJ 08512 USA
www.comm-port.com

CORP DOC 1/7/2021 3.12 ref 1

CPAS STANDARDS

EUROCERT
CERTIFICATIONS (UK) LTD.

CERTIFICATE

Certificate of Conformity **Appendix-I to Certificate No.: EU2854**

This Appendix shall be an integral part of the Certificate. All expressions and terms defined or used in the Certificate shall have the same meaning in this Addendum, unless the context clearly requires otherwise.

MANUFACTURER : COMM PORT TECHNOLOGIES INC.
PRODUCT GROUP : UNDER VEHICLE SURVEILLANCE SYSTEMS.
BRAND NAME : COMM PORT

This certificate referred to above covers the following products:

- UVSS/ UVIS FLEX SERIES
- UVSS/ UVIS CPAS SERIES

The CE mark as shown can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity & Compliance with all relevant EC Directives. The statement is based on a single evaluation of one sample of above mentioned product(s). This certificate is issued under the conditions that the quality system maintained in the manufacture of above referenced Models/Products & remains valid until the manufacturing conditions or the quality systems are changed subject to continuous surveillance according to the EC Guidelines. Further, Certificate validity is conditioned by positive results of surveillance audits.

Authorized Signatory

The Certificate is the property of EUROCERT CERTIFICATIONS (UK) LIMITED and shall be returned immediately on request.
Registered Office: 1st Floor, 2 Woodberry Grove, Finchley, London, N12 0DR. UNITED KINGDOM
Website: www.eurocert.uk.com

NDAA STATEMENT

May 20th, 2021

To Whom It May Concern:

RE: Comm Port Technologies Inc. Statement on NDAA Section 889 NDAA

The John S. McCain National Defense Authorization Act (NDAA) for Fiscal Year 2019 was signed into law on August 13, 2018. The law, specifically Section 889, amongst other things prohibits federal agencies, their contractors and grant or loan recipients from procuring or using "telecommunications and video surveillance equipment or services" from specific Chinese companies as a "substantial or essential component of any system, or as critical technology as part of any system." The NDAA ban includes telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation, as well as video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company, and their affiliated entities.

COMM PORT TECHNOLOGIES INC., POSITION ON NDAA COMPLIANCE

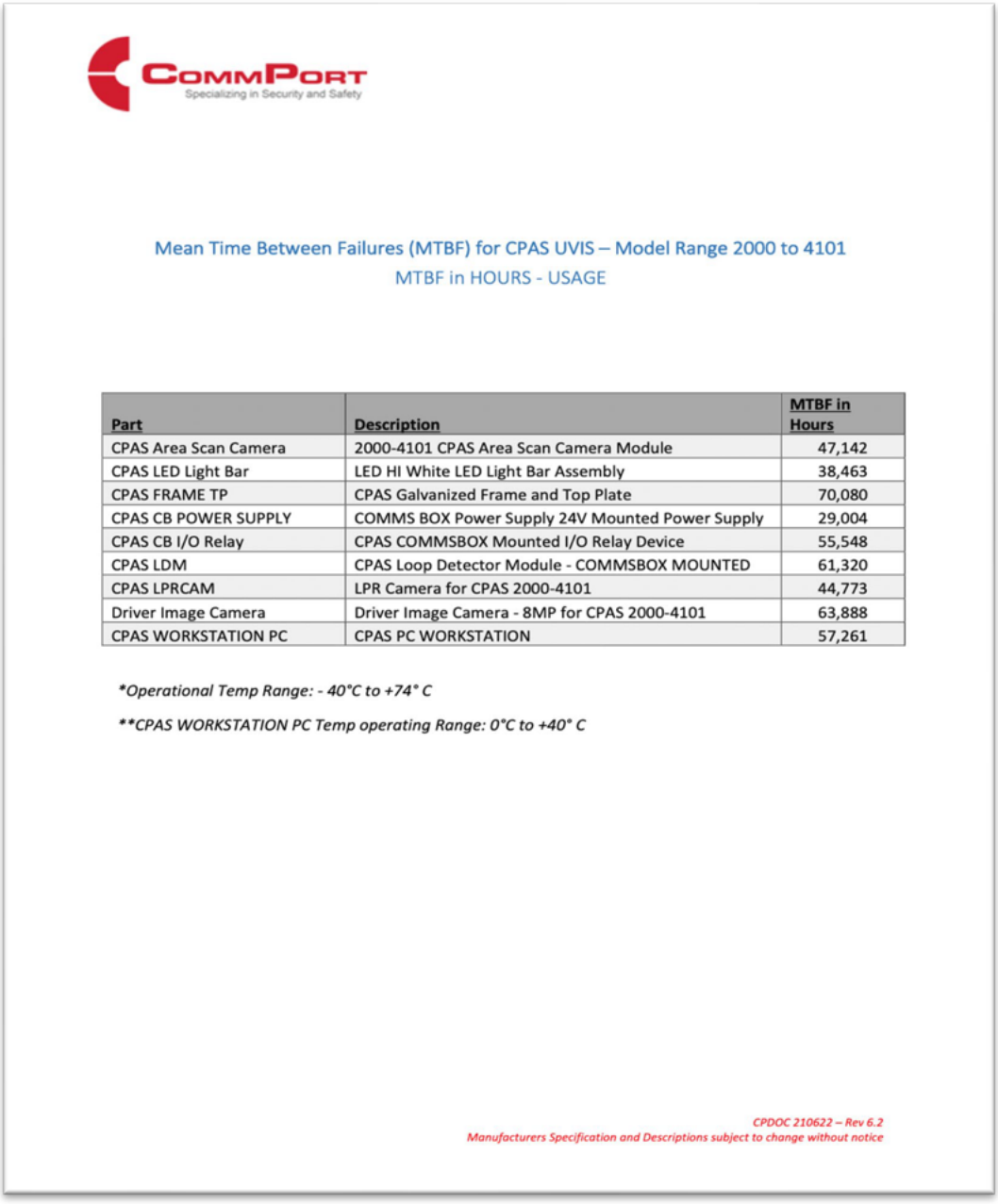
Comm Port Technologies Inc. is pleased to inform that the products we offer to the US Government, US Government contractors, and Grant recipients are Section 889 compliant.

Sincerely,

Benjamin Renshaw
Vice President of Sales
Comm Port Technologies Inc.
brenshaw@comm-port.com
T: 732-738-8780

Comm Port Technologies Inc.
1 Corporate Dr. Suite F., Cranbury, NJ 08512 USA
www.comm-port.com

CPAS MTBF



Mean Time Between Failures (MTBF) for CPAS UVIS – Model Range 2000 to 4101

MTBF in HOURS - USAGE

Part	Description	MTBF in Hours
CPAS Area Scan Camera	2000-4101 CPAS Area Scan Camera Module	47,142
CPAS LED Light Bar	LED HI White LED Light Bar Assembly	38,463
CPAS FRAME TP	CPAS Galvanized Frame and Top Plate	70,080
CPAS CB POWER SUPPLY	COMMS BOX Power Supply 24V Mounted Power Supply	29,004
CPAS CB I/O Relay	CPAS COMMSBOX Mounted I/O Relay Device	55,548
CPAS LDM	CPAS Loop Detector Module - COMMSBOX MOUNTED	61,320
CPAS LPRCAM	LPR Camera for CPAS 2000-4101	44,773
Driver Image Camera	Driver Image Camera - 8MP for CPAS 2000-4101	63,888
CPAS WORKSTATION PC	CPAS PC WORKSTATION	57,261

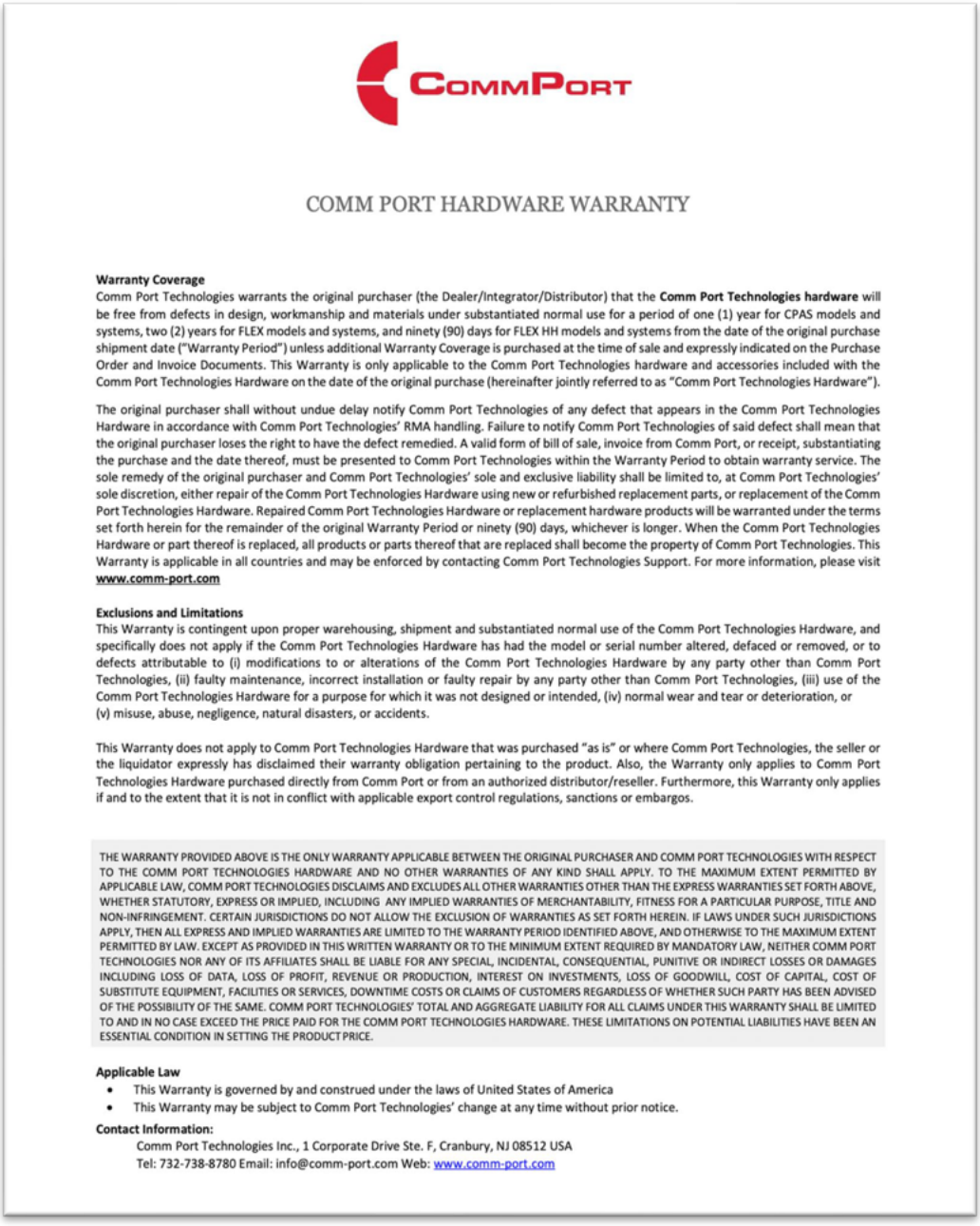
**Operational Temp Range: - 40°C to +74° C*

***CPAS WORKSTATION PC Temp operating Range: 0°C to +40° C*

CPDOC 210622 – Rev 6.2

Manufacturers Specification and Descriptions subject to change without notice

WARRANTY



COMM PORT HARDWARE WARRANTY

Warranty Coverage

Comm Port Technologies warrants the original purchaser (the Dealer/Integrator/Distributor) that the **Comm Port Technologies hardware** will be free from defects in design, workmanship and materials under substantiated normal use for a period of one (1) year for CPAS models and systems, two (2) years for FLEX models and systems, and ninety (90) days for FLEX HH models and systems from the date of the original purchase shipment date ("Warranty Period") unless additional Warranty Coverage is purchased at the time of sale and expressly indicated on the Purchase Order and Invoice Documents. This Warranty is only applicable to the Comm Port Technologies hardware and accessories included with the Comm Port Technologies Hardware on the date of the original purchase (hereinafter jointly referred to as "Comm Port Technologies Hardware").

The original purchaser shall without undue delay notify Comm Port Technologies of any defect that appears in the Comm Port Technologies Hardware in accordance with Comm Port Technologies' RMA handling. Failure to notify Comm Port Technologies of said defect shall mean that the original purchaser loses the right to have the defect remedied. A valid form of bill of sale, invoice from Comm Port, or receipt, substantiating the purchase and the date thereof, must be presented to Comm Port Technologies within the Warranty Period to obtain warranty service. The sole remedy of the original purchaser and Comm Port Technologies' sole and exclusive liability shall be limited to, at Comm Port Technologies' sole discretion, either repair of the Comm Port Technologies Hardware using new or refurbished replacement parts, or replacement of the Comm Port Technologies Hardware. Repaired Comm Port Technologies Hardware or replacement hardware products will be warranted under the terms set forth herein for the remainder of the original Warranty Period or ninety (90) days, whichever is longer. When the Comm Port Technologies Hardware or part thereof is replaced, all products or parts thereof that are replaced shall become the property of Comm Port Technologies. This Warranty is applicable in all countries and may be enforced by contacting Comm Port Technologies Support. For more information, please visit **www.comm-port.com**

Exclusions and Limitations

This Warranty is contingent upon proper warehousing, shipment and substantiated normal use of the Comm Port Technologies Hardware, and specifically does not apply if the Comm Port Technologies Hardware has had the model or serial number altered, defaced or removed, or to defects attributable to (i) modifications to or alterations of the Comm Port Technologies Hardware by any party other than Comm Port Technologies, (ii) faulty maintenance, incorrect installation or faulty repair by any party other than Comm Port Technologies, (iii) use of the Comm Port Technologies Hardware for a purpose for which it was not designed or intended, (iv) normal wear and tear or deterioration, or (v) misuse, abuse, negligence, natural disasters, or accidents.

This Warranty does not apply to Comm Port Technologies Hardware that was purchased "as is" or where Comm Port Technologies, the seller or the liquidator expressly has disclaimed their warranty obligation pertaining to the product. Also, the Warranty only applies to Comm Port Technologies Hardware purchased directly from Comm Port or from an authorized distributor/reseller. Furthermore, this Warranty only applies if and to the extent that it is not in conflict with applicable export control regulations, sanctions or embargos.

THE WARRANTY PROVIDED ABOVE IS THE ONLY WARRANTY APPLICABLE BETWEEN THE ORIGINAL PURCHASER AND COMM PORT TECHNOLOGIES WITH RESPECT TO THE COMM PORT TECHNOLOGIES HARDWARE AND NO OTHER WARRANTIES OF ANY KIND SHALL APPLY. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, COMM PORT TECHNOLOGIES DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES OTHER THAN THE EXPRESS WARRANTIES SET FORTH ABOVE, WHETHER STATUTORY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. CERTAIN JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF WARRANTIES AS SET FORTH HEREIN. IF LAWS UNDER SUCH JURISDICTIONS APPLY, THEN ALL EXPRESS AND IMPLIED WARRANTIES ARE LIMITED TO THE WARRANTY PERIOD IDENTIFIED ABOVE, AND OTHERWISE TO THE MAXIMUM EXTENT PERMITTED BY LAW. EXCEPT AS PROVIDED IN THIS WRITTEN WARRANTY OR TO THE MINIMUM EXTENT REQUIRED BY MANDATORY LAW, NEITHER COMM PORT TECHNOLOGIES NOR ANY OF ITS AFFILIATES SHALL BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR INDIRECT LOSSES OR DAMAGES INCLUDING LOSS OF DATA, LOSS OF PROFIT, REVENUE OR PRODUCTION, INTEREST ON INVESTMENTS, LOSS OF GOODWILL, COST OF CAPITAL, COST OF SUBSTITUTE EQUIPMENT, FACILITIES OR SERVICES, DOWNTIME COSTS OR CLAIMS OF CUSTOMERS REGARDLESS OF WHETHER SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF THE SAME. COMM PORT TECHNOLOGIES' TOTAL AND AGGREGATE LIABILITY FOR ALL CLAIMS UNDER THIS WARRANTY SHALL BE LIMITED TO AND IN NO CASE EXCEED THE PRICE PAID FOR THE COMM PORT TECHNOLOGIES HARDWARE. THESE LIMITATIONS ON POTENTIAL LIABILITIES HAVE BEEN AN ESSENTIAL CONDITION IN SETTING THE PRODUCT PRICE.

Applicable Law

- This Warranty is governed by and construed under the laws of United States of America
- This Warranty may be subject to Comm Port Technologies' change at any time without prior notice.

Contact Information:

Comm Port Technologies Inc., 1 Corporate Drive Ste. F, Cranbury, NJ 08512 USA
Tel: 732-738-8780 Email: info@comm-port.com Web: www.comm-port.com

CPAS AREA SCAN CAMERA

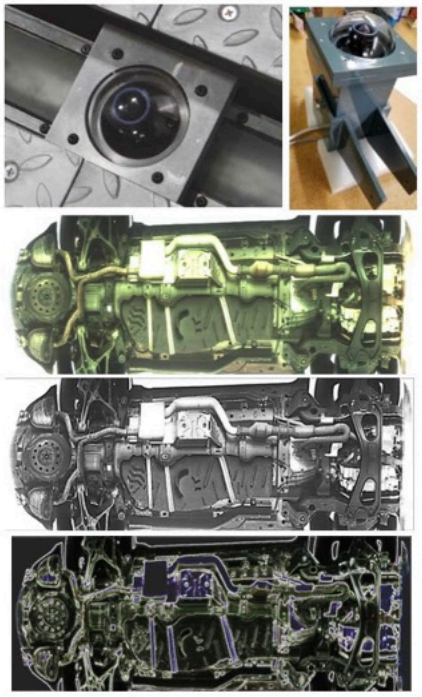
CommPort
Specializing in Security and Safety

CPAS-UVIS Area Scan Camera

CPAS-UVIS – Area Scan Camera

Embedded AREA SCAN Camera

Included with CPAS UVIS System -Not sold separately



Specification

- Advanced Area Scan Technology
- 172° FOV
- Gig-E Interface
- 1600 x 1400 @ 7.4 Micron
- 500 to 900 Frames per Second (FPS)
- 12 VDC
- Spectrum: Visible (400-700 nm), Near Infrared (700-1000 nm)
- Band Pass Filter
- CE/FCC/UL/RoHS Compliant
- Auto White Balancing
- Built in Bayer Conversion
- IP68 Rated Housing
- -40°C to +74°C Temp Range/ 95%RH
- Squared Lens Technology
- Optically Correct Sapphire Crystal Lens Housing
- Hydrophobic Coating
- High Resolution Color/Monochrome/Inverted Color Views

Model	Image Type	FPS
CPAS 2001	Monochrome	500
CPAS 2101	Color	500
CPAS 3001	Monochrome	700
CPAS 3101	Color	700
CPAS 4001	Monochrome	900
CPAS 4101	Color	900

**Specifications subject to change without notice*

CommPort Technologies Inc. 1 Corporate Dr., Cranbury NJ 08512 USA www.comm-port.com

CPAS WORKSTATION PC

CommPort
Specializing in Security and Safety

CPAS-PC WRKSTN

CPAS-PC WRKSTN

PC Workstation Computer

Included with CPAS UVIS System Package

Specification

- Intel i7-12th Gen. 12 Core, 25M Cache, up to 5.0 GHz
- Windows 10 Pro 64bit with MS SQL WIN 11 as of 5/2023
- 16GB DDR5, 1x16GB@4400Mhz, up to 128GB
- 512 GB PCIe M.2 Class 40 SSD + 1 TB 7200RPM HDD
- Intel UHD Graphics 770 with Shared memory
- Killer 1675 – 802.11ac 2x2 WIFI 6 + Bluetooth 4.2
- Add'l Network Card for CPAS Area Scan Camera with POE
- 14.7" (373mm) x 6.8" (173mm) x 16.8" (427mm) – H x W x D
- 16.4Lbs (7.5kg)

- Front Ports:
  - SD Card Slot, 3.5mm Audio, 2 x USB 3.2 Gen1
  - USB 3.2 Gen 1 Type A with Power
  - USB 3.2 Gen 2 Type C with Power
- Back Ports:
  - Kensington Lock
  - 7.1 Audio 6-Connector Audio Stack
  - DisplayPort HDMI
  - 2 x USB Type 2, 2 x USB 3.2 Type C Gen2, 2 x USB 3.2 Type A Gen 1
  - 1 x Gigabit Ethernet, 1 x Gigabit Ethernet with POE

- Preloaded and embedded CPAS MASTER Software
- Preloaded AnyDesk™ Software for Remote Technical Support

**Specifications subject to change without notice*

CommPort Technologies Inc. 1 Corporate Dr., Cranbury NJ 08512 USA www.comm-port.com

CPAS COMMBOX

CommPort
Specializing in Security and Safety

CPAS-COMMBOX

CPAS-COMMBOX
Weatherproof Communications Box

Specification

- All Weather Exterior Rated – IP 67
- Temp Range -40°F to + 165°F (-40°C to +74°C)
- 24.0" x 19.0" x 10.0" (610mm x 483mm x 254) H x W x D
- Vented Sun Shield
- Integrated Ventilation Fan
- 5 x Watertight Stainless Cable Glands
- Security Locking Watertight Sealed Door
- Mounting Ears, Pre-Drilled
- DIN Mounting Rails
- Cable Management
- Loop Detector Module
- Relay Module
- IP Based I/O Module
- Power Supplies for LED/UVIS/LPR/Driver Image Camera
  (Exact power supplies dependent on ordered system requirements)
- Option Fiber Optic TX/RX module

***Specifications subject to change without notice**

CommPort Technologies Inc. 1 Corporate Dr., Cranbury NJ 08512 USA www.comm-port.com

CPAS LPR CAMERA

CommPort
Specializing in Security and Safety

CPAS-LPR CAMERA

CPAS-LPR CAM

ARH VIDAR HDx 4th Gen.

Specification

- 1440 x 1080 Resolution
- 30 FPS, Color, Global Shutter
- Automatic Brightness Control
- Dual Motorized Zoom and Focus, remotely adjustable
- 17X optical Zoom
- Angle of View: 54° x 42° wide, 3.4° x 2.5° tele
- 4.8 – 84.6mm Variable Focal Length
- 4m - 20m / 13'- 65' LPR Range
- 50m / 164' Max range at optimal conditions
- 20m / 65' Max range at "0" lux
- 0 km/h – 300 km/h / 0 mph – 190 mph Vehicle Speed Range
- 6m / 20' Max Lane Coverage
- 850nm / 760 nm Illumination, Sync or Continuous
- 16° Illumination Beam Angle, Adjustable Parity Flash
  (Different intensity for odd/even frames))
- Over 190 country plates recognized with further recognition of regional specialty/color/government/special use plates/identifiers.
- 24-28 VAC - 11W
- -45°C to +55°C / -49°F to +131°F
- IP67, IK10
- 250 x 251 x 145mm / 9.84" x 9.88" x5.7"
- 4.5kg / 99.2lbs
- Camera, Bracket, Shield included

***Specifications subject to change without notice**

CommPort Technologies Inc. 1 Corporate Dr., Cranbury NJ 08512 USA www.comm-port.com

CPAS DRIVER IMAGE CAMERA

CommPort
Specializing in Security and Safety

CPAS-DRIVER IMAGE CAMERA

CPAS-DIC CAM

Driver Image Camera for CPAS Systems

8MP Color, POE, IR

PAR P8BIR

Camera	
Image Sensor	1/2.5" CMOS
Image Size	3840 x 2160
Electronic Shutter	1/25s ~ 1/100000s
Auto Iris	Fixed Iris
Min Illumination	0.01 Lux @ F1.2, AGC On; 0 Lux with IR
Lens	3.6mm Horizontal: 87.7° Vertical: 56.8°
Lens Mount	M12
True Day/Night	ICR
Wide Dynamic Range	Digital WDR
BLC	Yes
HLC	Yes
Defogging	Yes
Digital NR	2D/3D DNR
Angle Adjustment	Any Angle
Image	
Video Compression	H.265/H.264/MJPEG
H.265 Compression Standard	Main Profile @ Level 4.1 High Tier
Resolution	8MP (3840 x 2160), 1080p (1920x1080), 720p (1280x720), D1, CIF, 480x240
Mainstream	60Hz/30FPS: 8MP, 1080p, 720p 50Hz/25FPS:8MP,1080p,720p
Bit Rate	64Kbps ~ 16Mbps
Encode Mode	VBR/CBR
Quality	Five Levels Under VBR; Freely adjustable under CBR
Image Settings	ROI,Saturation,Brightness,Chroma,Contrast,Wide Dynamic,Sharpen,NR:Adjustable through client software or web browser
Audio Compression	G.711A/U
ROI	Each ROI to be configured separately
Interfaces	
Network	RJ45 x 1, 10M/100M self-adaption
Audio	MIC-in x 1
Video Output	CVBS Video Output (BNC x 1)
Functions	
Remote Monitoring	IE Browsing, Firefox, CMS Remote Control
Online Connection	Supports simultaneous monitoring for up to 10-users; Support multi-stream real-time transmission
Network Protocol	TCP/IP, UDP, DHCP, UPnP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP
Interface Protocol	ONVIF, GB-T/28181-2011
Storage	Network Remote Storage
Smart Alarm	Motion Alarm
Smart Analysis	Object removal detection, line-crossing detection and intrusion detection
PoE	Yes
IR Distance	98 Feet
Environmental	IP66 Weather Resistant
Other	
Power Supply	DC12V/PoE
Power Consumption	<4.5W
IR Consumption	<7.5W
Operating Environment	-30° ~ 122°F (-34° ~ 50°C), 10-90% Humidity
Dimensions	Ø 3.42 x 8.62 Inches (87x219mm)
Weight	1.34 lbs. (609g)

*Specifications subject to change without notice

CommPort Technologies Inc. 1 Corporate Dr., Cranbury NJ 08512 USA www.comm-port.com

CPAS SOFTWARE

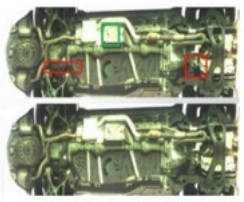
CommPort
Specializing in Security and Safety

CPAS-SOFTWARE PLATFORM

CPAS-SW

CPAS Software Platform

Preloaded on CPAS WKSTN PC



Specification

- Windows 10 Pro 64bit with Full MS SQL DB
- Preloaded and embedded CPAS MASTER Software
- 1 TB Storage (*approx. 300,000 events)*
- Up to 4 TB available
- Under Vehicle Scanned image at 2.25MP
- Color/Monochrome/Inverted Color selectable
- 64X Zoom with Spot Zoom Feature
- Adjustable Brightness & Contract
- License Plate Image and OCR Display
- Driver Image Database Image
- 9 x Real time Driver Image Snapshot Selection and Viewing
- Up to 2 x LPR per lane
- Database Vehicle Entry List
- Current Entry List
- Multi-Level User Password Hierarchy/ Roll Based Access & Permissions
- Customizable Report Generation and Export/Printing
- Automatic Change Detection Module (ACDM) - Anomaly/Foreign Object Detection
- Adaptable Matrix Software (AMS) for Customization of Lane Device Sequence and Timing
- Database Upload and Export Wizard
- Component Level System Status/Connection Indicators
- Preloaded AnyDesk[tm] Software for Remote Technical Support
- One-time Perpetual License

**Specifications subject to change without notice*

CommPort Technologies Inc. 1 Corporate Dr., Cranbury NJ 08512 USA www.comm-port.com

CPAS SYSTEM HARDWARE

CommPort
Specializing in Security and Safety

CPAS-System Overview

CPAS-UVIS System

System Hardware/Overview

Specification

- 45-75kmph (30-45mph) Vehicle Speed
- 500 to 900 Frames per Second (FPS)
- IP68 Rated
- - 40°F to +165°F /-40°C to +74°C Temp. Operating Range
- 78 Tons per Axle Vehicle Weight Rates (110 Tons Optional)
- Optically Correct Sapphire Crystal Lens Housing
- Hydrophobic Coated Lenses
- Structural Steel with Rust Resistant Galvanized Steel Plates
- 0.8 Seconds Scan to Screen Time
- No Limit to Vehicle Scan Length
- Vehicle Scan Width to 2.9M/9.5'
- 36X High Intensity Micro Controlled White LED illumination
- Adjustable LED Light Bars
- Adjustable Depth Frame Support Brackets
- Flush to Ground Installation

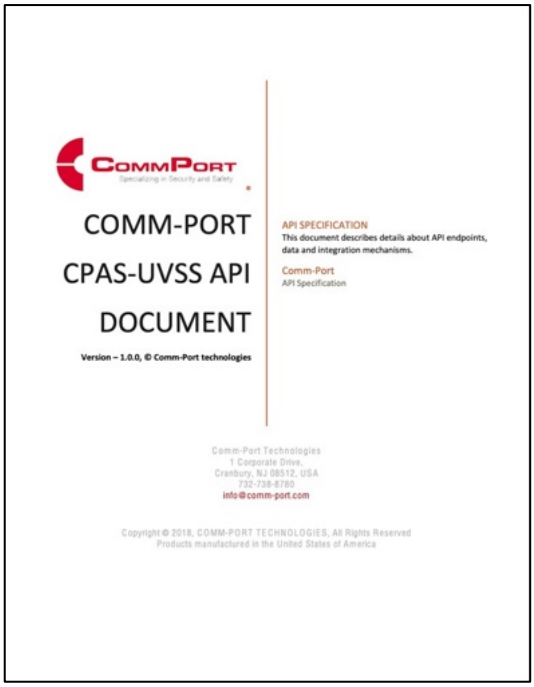
*Specifications subject to change without notice

CommPort Technologies Inc. 1 Corporate Dr., Cranbury NJ 08512 USA www.comm-port.com

CPAS API & INTEGRATION

Comm Port Technologies offers and Full API and Support Integration Services. The API is distributed free of charge to verified Dealers/Integrators/Consultants/A&E firms. Integration support services are quoted on a per project basis dependent on agreed Scope of Work and other Variables.

Comm Port also offer a range of already established Certified Integrations with many Security and Defense industry leading manufactures of related systems. Please contact your CommPort representative for further details and information.



COMM PORT -CPAS SUPPORT SERVICES

- Full Standard Factory Warranty Support
- Extended/Special Project Site Warranty
- Remote Technical Support
    - Phone
    - Video
    - Remote System Log-in
- On-Site Technical Support by Factory Technicians
- On-Site System Commissioning
- Dealer/Integrator Training
- On-Site Customer Training
- Service Level Agreements
- Project Registration
- Consultant/Architect/Engineer Support Services
    - Site Configuration
    - Concept of Operations Review
    - A&E Toolbox
- Preventative Maintenance Programs
- Software Maintenance Programs
- Spare Parts Staging
- Extensive Sales and Marketing Library
- API and Integration Services
- Special Project NRE quotations