Surveillance Vehicle Specification as follows:

Surveillance Compartment
The GTSE-705 basic surveillance van represents a new era in Mobile Surveillance Platforms!
The GTSE-705 is constructed from high quality materials and built by
craftsmen with over 30 years of experience in vehicle design. All surveillance platform designing is engineered with AutoCAD and manufacturing is produced at Production and Training facility. On premises manufacturing provides strict 24-hour security, maintaining Confidentially of the customers platform designs and appearance.

**Surveillance Compartment, Framing, Insulation, Finish and Floor**

The van floors walls and ceiling are filled with a minimum of 50 to 75 mm of polar insulation. The sub floor shall be constructed with 12mm AC grade plywood. The flooring shall be secured to the floor framing every 300mm with self-taping screws. The sub floor shall be covered with automotive carpeting, which conforms to EU TUV and US standards for (Flammability of Interior Materials, Passenger Cars, Multipurpose Passenger Vehicles, Trucks and Buses) and of the Federal Motor Vehicle Safety Standards and Procedures. US Dept. of Transportation (DOT HS805-674 revised April 1985). All exposed and unfinished edges will be bound or have carpet mouldings installed. The ceiling and walls are covered with heather gray fabric to add a third dimension to the materials interiors appearance.

**Bulkhead Partition with Lockable Sliding Door**

The GTSE-705 comes with a disguised front bulkhead that is fitted into the ceiling and floor framing of the van for added strength to the vehicle. The bulkhead has a sliding pocket door hidden within its frame. This door has a sliding video viewing port with a second added IR sliding glass to allow a black and white camera to shoot through and maintain light tight. The sliding door has a one inch keyed dead bolt lock assembly at the bottom of the door. The lock is keyed from the driver’s side and an easy to turn knob on the operational side. (If the vehicle model has factory fitted bulkhead and window, this will be left in position instead of bulkhead as above)

**Command Console**

All wiring is encased in conduit wherever possible and connected to electrical boxes with the approved connectors. The steel conduit and boxes minimise the RFI and EMI interference generated by tactical radios or DC to AC inverters when required. All wiring is multi-stranded and sized for maximum equipment load capability. All audio carrying cables are 100% shielded listed
cables to ensure quality audio.
The battery cables are 1100 multi-strand battery cable, designed to carry any amperage load requirement that the operational compartment requires.
The 12-vdc-battery power is controlled through a high quality on/off bus switch. The switch allows power to flow from the battery to the main control panel.
The main on/off switch is located next to the side cargo doors; this switch controls all power to the surveillance operational compartment.
The main system control panel individually operates the equipment within the module. Each item or group of items is switched and circuit protected from the panel. A green LED indicator light is mounted on the switch, when illuminated indicates that power is supplied to the equipment selected.
The main control panel controls, and circuit protects, 16 separate items or groups of equipment.
The main control panel has one (1) 12 vdc digital voltmeter with backlight. One (1) 12-vdc digital amp meter with backlight and one (1) 24-hour clock with battery back up.

**Wall Mounted Power Source**
Four (4) 12-vdc cigarette power outlets and switchable110/220V AC outlets are placed throughout the rear operational compartment for additional equipment requirements.

**Command Console Desk and Storage Cabinet**
The main equipment rack will house all of the rack-mounted electronics such as. The audio recorders, video recorders, and other video/audio options that may be required.
The main control panel is installed on the driver’s side, work counter wall above the desk area. LCD Flat video screens are wall or desk mounted.
The panel is within the reach of the operator at all times, the main control panel controls all of the equipment functions in the operational compartment at an arms length.
Climate Control
We provides a low noise inverter battery powered air conditioning system, allowing hot and cold air into the surveillance compartment.

The system is controlled from three switches allowing the operator to operate the high/low fan speeds, system operation or cooling system power ON/OFF.

Special Window Treatment
The van is designed with up to five (5) disguised window-viewing ports, (dependant on vehicle selected). Infra Red 780-nano-meter glass allows the operator to view out through the red tint glass. The view to the operator’s eye will appear to be light red in colour. A black and white camera will see everything crystal clear. On a bright sunny day some colour cameras will display the picture in a light brown or orange colour. Typically, most standard colour cameras can not see through infra red glass, i.e., your colour camera will be used with your retractable video scope, or when you remove the Velcro attached IR glass viewing port.

All of the window blackout pads have 150x 200mm fold down ports that open to allow for viewing through the van clear exterior glass window to facilitate special video needs.

The front bulkhead doors sliding window measures approximately 150mm high x 200mm long. This window allows the operator to video through the front cab area.

The rear door window viewing ports size is approximately 150mm high x 200mm long, creating optimum video viewing and recording from the rear door windows.

A camera wall mount bracket is located at each window video viewing port. This bracket allows the operator to install a Man front Magic Arm at that video port and position a camera of choice in place.

Rear Compartment Seating
A primary operator’s seat shall be installed at the knee opening area of the main console cabinet, which will provide the operators with access to all equipment and controls without moving from his seat.

The Custom operators seat is contoured for long term sitting, adjustable back, swing up arm rests, 360 degrees swivel chair base with recline and
forward/reverse functions allowing full adjustment.
The second seat supplied for a second operator shall be a padded jump type seat, which will be fixed to the front bulkhead by the side sliding door.

**Lighting**

Three (3) 450mm flexible gooseneck lights with interchangeable red or clear lenses. These lights can be switched on and off from the fixture or main control panel.

One (1) 450mm 12-vdc ceiling mounted two-bulb fluorescent light. This light can be switched on and off from the fixture or the main control panel.

Three (3) aircraft style ceiling lights, controlled from the light and main control panel. Blue and Red in colour for operations at night.

One (1) under the counter red light switched at the light or main control panel.

**Air Circulation System**

The air circulation system is capable of providing a quick change of air and shall be installed in the rear compartment. The fresh air is brought in from the drivers cab air vents and the DC brush less fan is installed in the front bulkhead wall behind the passenger’s seat at the floor. Exhaust fans are mounted within the rear doors and side doors on these fans also provide window defogging for the rear cargo doors. The exhausted air from the operational compartment is finally vented through the sound dampened baffled floor vents next to the rear cargo doors on each side.

The side cargo doors have a sound dampening fans installed within them to help minimise window fogging. These fans are silent running and hidden from view.

The 12vdc brush less fan motor is designed to emit no **RFI or EMI** interference utilising our suppression designs.

The van has approximately 200 cubic ft of interior operational space. We have installed a 110-CFM (cubic feet per minute) fresh air intake fan to help insure optimal fresh air exchange.

**Battery System**

Four (4) AGM High Capacity Gel Cell rack mounted in a steel battery cabinet
or concealed under the bench seating or rack unit.
Absolutely no maintenance required 100% Gel construction, no liquids.
Rapid recharge rate. Recharges substantially faster at normal rate of change and will not be damaged if a higher rate of charge is applied.
100% recovery from deep discharge, even if left for uncharged for a month.
Exceptional power output.
Power increases to 115% of rated capacity after use of battery begins.
Extremely low self-discharge rate, less than 2% per month at room temperature.
No dangerous or corrosive gas vapours during operation or recharging use.
Leak proof construction
Five (5) year limited warranty from the factory

**Charging System**
The GTSE-705 van is equipped with a 10, 50 amp pulsed input charger / inverter. This charger utilises a pulsed input charging for maximum charging capacity.
A remote control charger & inverter status panel is also provided. The overall electrical system is fused with a fast action one at a time fuse.
The pulsed input charger will not over charge the battery and will allow the charger to be plugged in for continuous duty.
The charger can be charge up to 2 battery banks at the same time. This allows for a second battery if required.
Located in the front grill is a male 16amp 220vac plug, which allows the operator to plug in heavy-duty extension cable to supply power to the charger. The cable is stored behind the front grill and remains out of sight until used for charging.
A 7.5-meter, 16amp three-conductor heavy-duty extension lead is provided. Dependant on the number of batteries and the vehicle involved, the vehicle’s charging system will charge the rear battery(s) only while the vehicle’s engine

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**Inverter**

A 1000-watt DC to AC crystal controlled power inverter shall be provided for the purpose of operating the rear auxiliary 725-watt Ceramic Heater. The inverter shall maintain a constant 220vac at 50 Hz with a frequency deviation not to exceed .001 Hz with remote function control and display panel.

**Surveillance Periscope**

One “Retractable Videoscope” is provided with a Multi functional hand held scope controller with:
- Zoom in & out
- Focus in & out control with a variable speed control
- 360 Degree rotation with variable speed control
- Upper mirror motor control for up & down
- Lower Mirror Control, Manuel adjustment from knob on front panel
- Retractable Turret up & down motor control
- Quick cable connector for motorised powered video lenses
- Defog mirror fan
Optical quality front surface mirrors.
Camera and lens quick release with tripod screw allows for change out in 30 seconds

**Video Input Switcher**
One (1) low loss video switcher, which distributes the video signal to be necessary video recording equipment with the turn of a knob.

**Video Recording Port Panels**
Three (3) low loss 100% shielded video cables will be linked to the video switcher:
One (1) cable for the driver side camera viewing port
One (1) cable for the bulkhead door and passenger side door camera viewing ports.
One (1) cable for the retractable Videoscope in the ceiling

Video patch panels are located at both the front and rear areas with BNC connectors for easy input of the video signal. At each patch panel is a two-pin power plug for camera power. We provide the power and video cable for each video port. The video patch panels are labelled for easy identification.

**Surveillance Camera and Lens**
One (2) S321 CCD low light colour camera, 0.2mlux with four field integration, 580 TV lines of resolution.
One (1) 16 to 160mm motorised video lenses shall be provided. The lens will be pre-wired to connect directly to the retractable Videoscope.
One (1) 10 to 300mm motorised video lens shall be provided. The lens will be pre-wired to connect directly to the retractable Videoscope.

**Surveillance Monitor**
Two (2) LCD TFT 15” colour monitors, 12vdc. Multi Standard with remote control

**Video Recorder**
4 Wavemaker Pro professional digital video recorders installed in 19” rack each with 120Gb removable hard drive. 580line resolution broadcast quality playback. Installed with 4 mini screen playback viewers and full editing suite. Total 6u rack.
Main Auxiliary Patch Panel
- One (1) BNC video Input Jack
- One (1) BNC video Output jack
- One (1) RCA audio Input jack
- One (1) RCA audio Output jack

Integrated Audio System
The Audio Distribution System is a standard feature in our surveillance platforms and has the following functions:

Four (4) audio inputs for:
- Specialist Intelligence Receiver
- Scanner Receiver
- Future Auxiliary Audio Inputs
- Future Auxiliary Audio Inputs

Three (3) selectable audio outputs, which permit routing of any audio, input signals to:
- Audio Digital Marantz 600 Recorders
- Video Recorders
- External Auxiliary Speakers
- Auxiliary Audio Outputs

Audio interface permits the audio outputs to be routed to the audio tracks of all connected recorders’.
Conversion and Equipment Summary


2. Surveillance conversion includes Floor, walls, front bulkhead, ceiling framing, and minimum of 50mm Polar insulation and equipment counters and cabinets. The Carpeting, Formica finishing, wiring in steel flexible conduit and junction boxes are provided. The interior lighting package includes (overhead florescent light, flexible gooseneck lights, red under counter lights, and ceiling aircraft style lights) with all necessary equipment and installation.

3. Auxiliary power system to include: Four AGM deep cycle batteries battery box, 160 amp Vanner isolator and relay, 50 amp gel cell pulsed battery charger, power control panel with engine kill switch, 220vac shore power indicator light.

4. Fixed front bulkhead wall with sliding entry and exit door, side door window disguises with video viewing ports, IR one-way removable Plexiglas inserts and lens boot.

5. One Main operator’s control panel, this panel to control all surveillance equipment and systems of the operational compartment. This panel will also monitor the battery status and current draw of the operating equipment.

6. One Low Noise Air Conditioning System

7. One Captain’s chair with swing-up armrests, adjustable back, 360-degree swivel base.

8. One, 1000 watt 12-vdc to 220-vac inverter & 50 amp Battery Charger with remote control battery status digital display indicator with push button selection.

9. One (1) Colour/Black & White CCD low light cameras

10. One (1) Retractable video scope with hand controller and mirror defog fan.

11. One (1) 16 to 160mm motorized video TV lens @ F1.8

12. One (1) 10 to 300mm motorized video TV lens

13. One (1) Video & audio vehicle perimeter observation system with quad switch

14. Two (2) LCD TFT 15” colour monitor, 12vdc.
15. Four (4), Wavemaker pro rackmount digital video recorders 12vdc
16. Two (2) CTSE wall mount brackets for the Manfroto Magic Arms.
17. One (1) four way composite video switcher.
18. One (1) R8500 Scanning Receiver
19. One (1) 1.2kg Multi purpose fire extinguisher
20. One (1) Tactical VHF Transceivers – Client supplied
21. One (1) Tactical UHF Transceiver – Client supplied
22. One (1) Tactical HF Transceiver – Client supplied
23. One (1) Covert Antenna System.
24. One (1) LCD TIF Monitor 6.0” LCD monitor will be installed to view the vehicle security cameras. 12vdc powered.
25. One (1) Laptop computer fitted with WiFi b/g, Bluetooth and GPRS GSM card for onward transmission of all recorded data
26. Four (4) Rapid Deployment COFDM digital A/V transmitters with 2 channel audio, 8Mhz bandwidth, 2000 carriers, Mpeg 2, with cameras.
27. Four (4) 1U 19” Rackmount COFDM A/V receivers
28. One (1) QE10 audio filter to enhance audio inputs Audio selector for exterior microphones Intercom system front to rear with PTT & manual switching.
29. One (1) Integrated Audio Distribution System
Four audio inputs, three selectable outputs, via audio interface to all installed audio & video recorders audio channel(s).
30. One (1) Amplified speakers & Headphones
31. One (1) PMD-221 three head audio recorder with 12-4.9vdc converter.
32. One (1) Vehicle alarm system with Ignition cut out
33. One (1) Remote horn signalling
34. One (1) GSM Cell phone roof/wing mounted antenna
35. One (1) Transceiver antenna (depending on vehicle & frequency – covert mounted)
36. One (1) Video Patch antennas fitted to front and rear of vehicle
Optional extra PNPXD4 Night vision monocular with C mount for fitting to periscope camera system.
Total cost of installation plus all parts listed 1-36 = € 480,000 Euros

Cost of vehicle extra
Cost of all freight extra
- Delivery time approx 12 - 14 weeks after receipt of vehicle
- Warranty 2 years
- Full training on all systems given free of charge at manufacturer premises. Additional surveillance training, if required, will be quoted separately.
- Payments terms:
  60% with order confirmation
  40% by irrevocable L/C payable at sight.