

DMT Mobile Security Vehicles

DMT builds custom mobile security vehicles for parked and on-the-move operations. They may be used for VIP security (in-vehicle or accompanying vehicles), special event security, waterside security, airport security, border security, and for any application requiring temporary or mobile security.

There are many options available, but this datasheet describes what is most commonly ordered. The table on pages 2 and 3 provides the main components with general descriptions. The vehicles themselves are always based on what is available on the lot at the time of order, so 2017-year models are available for 2016-2017. Standard color palettes of brackets, shelters, and cowlings match the colors available for the vehicles. The radar comes in white, gray, tan, or green dome with black or white base. Cameras will be color matched; however, some cameras are available only in one color.

The sensor package consists of a radar and a camera. The radar detects moving objects and plots their position on a map display. The camera is automatically pointed to that same position. As the object moves, so does the camera. Data is recorded and displayed on the included laptop PC-based command station. The command station is set on a flip-up desk at the right, back seat passenger. Next to the desk is a power console that allows the operator to enable/disable power and to view battery charge information.

There are 3 methods of powering the systems – AC power, onboard batteries (for about 4-6 hours), and through the add-on alternator provided.



Figure 1. DMT adds a second alternator to power sensors.



Specifications of MSV

Item	On-The-Move Solution	Park and Secure Solution
Picture		
Vehicles	2017 Yukon (or Suburban) 2500HD	2017 Sierra 2500 Denali
Shelter (Cap)	N/A	Included with side cabinets for electronics. Painted to match vehicle color. Includes wide rear doors & roof door.
Lift	N/A	Lift included to raise radar and camera above the shelter roofline.
Radar	AIMS Fast-Scan, AIMS HDR, IDAR For up to 1.5 km (walking human) Black Marlin for up to 3 km (walking human)	AIMS Fast-Scan or AIMS HDR for up to 3.0 km (walking human) XRDS radar for up to 6 km (walking human)
Camera	PVP Night Hawk CMG gyrostabilized Thermal/CCTV camera Or FLIR PT-606 with electronic stabilization Or Lockheed Gyrocam 9L gyrostabilized Thermal/CCTV camera Or Moog Aria Midwave Cooled Thermal/CCTV camera	FLIR PT-606 Or PVP Night Hawk CMG Thermal/CCTV camera (electronic stabilized) Or MoogS3-Mercury225 Thermal/CCTV Camera Or MoogS3-MLR550 Thermal/CCTV Camera
Electronic Communication and power	Autosensing AC/DC charging system and battery charge. Additional alternator added to motor to provide power when vehicle is running. Wireless communication is optional.	Autosensing AC/DC charging system and battery charge. Additional alternator added to motor to provide power when vehicle is running. Wireless communication is optional.
Command Station	DMT's Engineering Station (Laptop Runs AIMS Remote Client)	DMT's Engineering Station (Laptop Runs AIMS Remote Client)
Monitoring Software	AIMS Remote Monitoring Client	AIMS Remote Monitoring Client
VMS (Video Management Software)	AIMS Remote Monitoring Client and Milestone VMS	AIMS Remote Monitoring Client and Milestone VMS



Item	On-The-Move Solution	Park and Secure Solution
Blue Force Tracking	Optional – Allows for tracking security guards or police with installed transponders (Available for domestic sales only)	Optional – Allows for tracking security guards or police with installed transponders (Available for domestic sales only)
Shock Absorbing Mounts	Standard on roof	Standard on lift
Sirens, Lights, Speaker	Standard	Standard
Support	Remote Access Support available	Remote Access Support Available
Warranty	1-year limited warranty	1-year limited warranty



Figure 2. Pull-out tray for sensors when they are being prepared for long-range shipping.

The Yukon system has internal storage (Figure 2) for the radar and camera. This is used when the system is put in storage or when being transported long distances or on overseas flights.

The Yukon SUV system works while the vehicle is parked or while it is moving. The algorithms provided in the radar compensates for the vehicle's movement. The maximum speed for precision operation of sensors is 72 mph and less, although the sensors will continue to operate in a somewhat degraded mode at speeds well in excess 90 mph.

The Sierra system is deployed only when the vehicle is parked. There is no on-the-move capability. When finished, the operator lowers the lift and closes the shelter roof via a motorized door. The lift has a capacity more than double the stated payload of sensors. There are limit and safety switches to prevent improper or accidental operation of lifts and doors.

The maximum operating temperature range of this entire system is -40 to +65 degrees C. DMT ensures the payload rating of each vehicle is preserved with the integration of the equipment mentioned above. A total of 4 passengers with one personal bag as well as an additional 100 pounds of miscellaneous weight is permitted with this equipment payload.

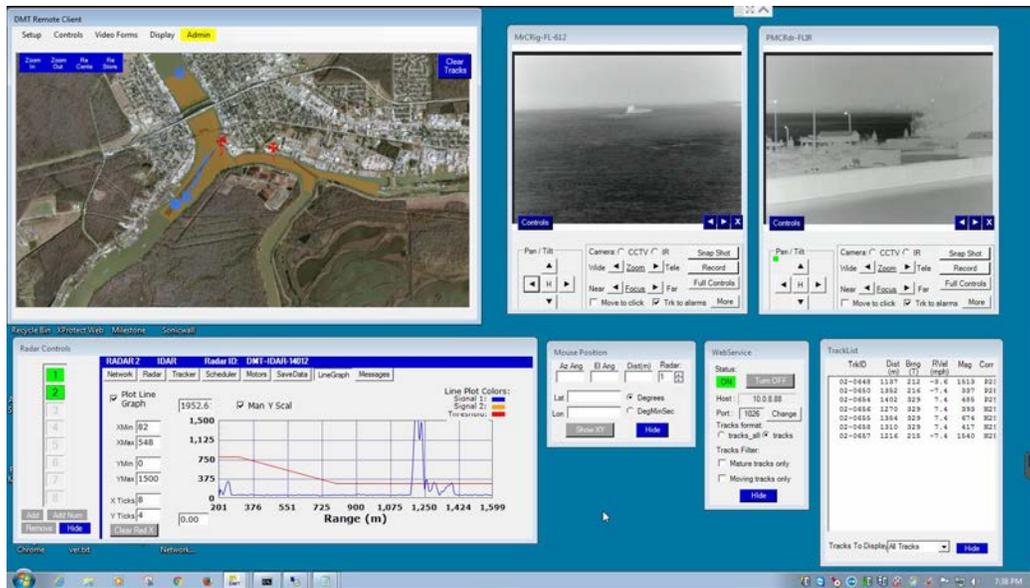
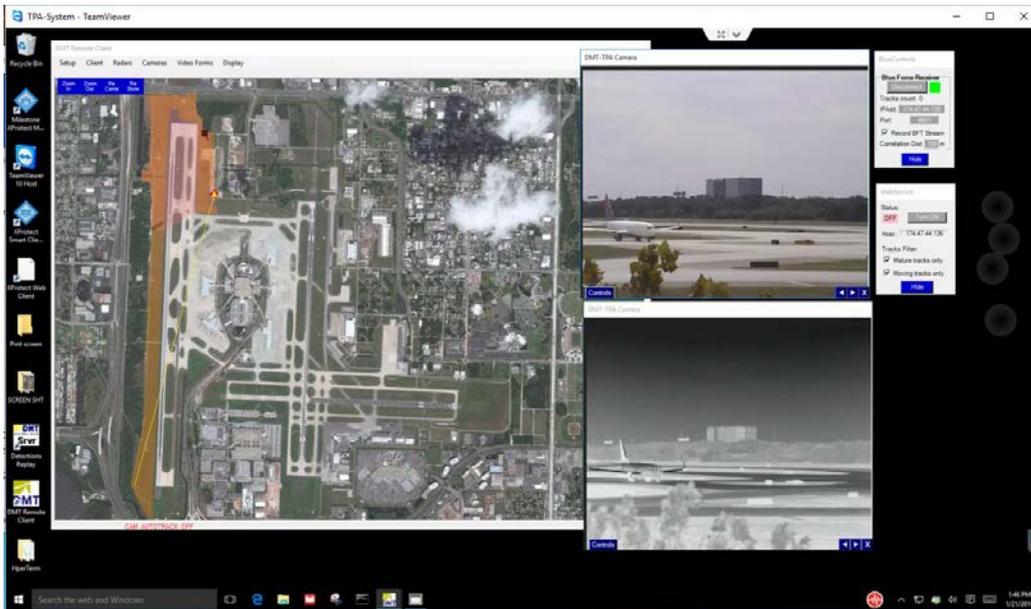
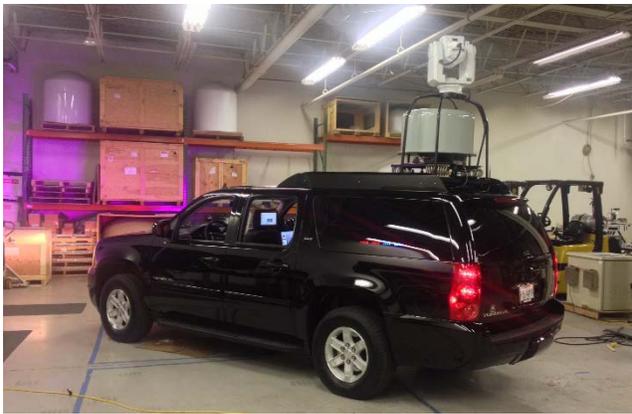


Figure 3. DMT Remote Client is used for monitoring tracks and video for vehicle. It runs on Windows 7 Pro and 10 Pro. It is normally provided on a laptop PC.

Gas mileage is less than that stated by the manufacturer due to the increased weight and by the addition of the shelter (cap) for the Sierra. Each vehicle's oil and servicing schedule should be performed more frequently than recommended by the manufacturer if the vehicles are used often.



Figure 4. The two DMT MSV systems are shown here. The Sierra Truck System on the left and the Yukon (or Suburban) shown on the right.



GMC Yukon XL



Figure 5. Optional Camera Mount shown here. This model allows for the camera the radar to be removed when not in use. It also allows a wider selection of cameras to be mounted on the vehicle.



Figure 6. Interiors of the vehicle are refinished after the careful installation and integration of electronics. Many types of sirens and flashing lights of all kinds are included.

For more information about the vehicles, prices or performance, contact: