

Frequently Asked Questions

System Maintenance and Cleanup Issues



How do I create a full system backup?

VIASAT DAP Profile 1.21.811 or higher must be installed on the handheld computer to perform a full backup set. The backup files must be stored in non-volatile memory.

Backup

To create a backup set, launch the **Backup-Restore** utility using the shortcut on the desktop. Select **Execute Backup** from the **File** menu, choose the **Local Non-Volatile Storage** option, then click **Next**. Click **Browse** to locate the target folder for the backup files, select **Storage Card** in the permanent storage list, then type a folder name in the **Local Path** field. Click **OK** to accept the target folder, verify the local path, then click **Execute** to start the backup process. When the **Script execution** dialog disappears, the backup is completed. Select **Exit** in the **File** menu to close the utility.

Restore

Warning: Restoring the system will override system registry and program files.

To restore from an existing backup set, launch the **Backup-Restore** utility using the shortcut on the desktop. Select **Execute Restore** from the **File** menu, choose the **Local Non-Volatile Storage** option, then click **Next**. Click **Browse** to locate the target folder for the backup files, select **Storage Card** in the permanent storage list, then type a folder name in the **Local Path** field. Click **OK** to accept the source folder, verify the local path, then click **Execute** to start the restore process. When the **Script execution** dialog disappears, the operation is completed and the system is automatically reset.

How much memory is available in the system?

To determine the storage memory left in the system, launch **EZTag CE**, then display the status bar. System resource indicators are displayed on the right side of the status bar. Click the icon switch to toggle between the visual and numeric display. The numeric display gives the percentage available.

What file systems are supported by Windows CE?

Windows CE supports the **FAT** file system for up to four gigabytes (4 GB) of storage memory.

The file allocation table (**FAT**) **Windows CE** driver works with any external storage cards that you can plug into your mobile device, such as Advanced Technology Attachment (**ATA**) cards, linear flash cards and PC Cards. This includes **FAT12**, **FAT16**, and **FAT32**, used by the **ATA** and **SRAM** PC Cards and Compact Flash (**CF**) and Secure Digital (**SD**) cards.

VIASAT GPS Systems include an option for pre-installed flash storage memory. The following table indicates the recommended format parameters when using external storage cards on VIASAT GPS Systems:

Size	256 MB	512 MB	> 512 MB	> 1GB
FAT	16	16	16	32
Cluster Size (KB)	16	32	32	64
Root Entries	4096	4096	4096	4096

What accessories are available to help protect my handheld computer?



Carrying case
5000X

Rubber keyboard
protection membrane
5000X

Transparent touch screen
protection film
5000X

How do I optimize system performance?

VIASAT recommends installing programs to disk and storing data and documents on the disk (pre-installed flash storage memory). This also improves performance because more main memory can be allocated to running programs.

Note: VIASAT GPS Systems devices automatically manage the proportion of main memory allocated to running programs (volatile RAM).

Here is a list of best practices to include in a good maintenance plan:

- If possible, split large data files (especially mapping data files) into smaller files for faster operation.
- Keep project file as small as possible.
- Close unused programs to free up program memory.
- Clean up the file system by removing old data files and useless programs.
- Optimize or defrag the flash file system to reduce memory access time (monthly basis).

Follow this procedure to optimize a data directory on the pre-installed flash storage memory in the VIASAT GPS Systems:

1. Close any running programs including **EZTag CE**.
2. Perform a soft reset on the handheld computer.
3. Launch the **FolderOptimizer** program with the shortcut on the desktop, select the **EZTag CE** data folder in the dropdown list, then click **Optimize**.

Note: FolderOptimizer prepares the EZTag CE data folder for optimal operation.

Use the following procedure to optimize a storage card (flash file system) as the pre-installed flash storage memory in the VIASAT GPS Systems:

1. Close any running programs including **EZTag CE**.
2. Perform a soft reset on the handheld computer.
3. Establish a Microsoft ActiveSync connection with a desktop computer.
4. Using Microsoft ActiveSync, copy all files from the **Storage Card** folder on the handheld computer to a folder on the desktop computer hard disk.
5. Delete all the files in the **Storage Card** folder on the handheld computer.
6. Copy all files previously copied to the desktop computer hard disk to the handheld computer's **Storage Card** folder.

Note: It is strongly recommended to use an Ethernet connection to perform this procedure. This is the equivalent of running a defrag operation on the storage card file system. Since flash memory modules support a maximum number of read/write cycles, this procedure helps maximize the life of the storage card when compared to the memory-intensive defrag process.

How do I check if the integrated GPS receiver is working correctly?

Turn OFF the handheld computer. Verify that the GPS antenna is connected and mounted correctly. Turn ON the handheld computer and then start **EZTag CE** software to monitor the satellite tracking status. When the receiver outputs a valid position, click **Satellite Visibility** in the **View** menu, then verify that the SNR (signal to noise ratio) values for the highest satellites in the constellation are higher than 45.

If the SNR values for the highest satellites in the constellation are below 42, with the GPS antenna correctly mounted and observing an open sky (no obstructions), call the VIASAT GPS Systems Sales Department to get an RMA number and shipment instructions for a repair order.

GPS Antenna Connection

Connect the antenna to the GPS connector located on the top cover of the handheld computer. Tighten the locking sleeve **finger tight** only. Check the antenna cable for scratches or loose connectors.



Always connect the GPS antenna before starting EZTag CE.

GPS Antenna Mounting

Position the antenna to obtain the clearest possible view of the sky and horizon in all directions.



The GPS antenna must be a least 30 cm away from the handheld computer's screen when the system is in use.



Can the system be used under extreme conditions?

Yes. VIASAT GPS Systems have been designed and built rugged to operate in the harshest environments.

Can I repair the system myself?

Almost any software issues can be fixed easily and will not affect the unit warranty.

However, hardware issues that are covered by the unit warranty must be repaired by VIASAT to maintain that warranty. Call a VIASAT GPS sales representative to get an RMA number and shipment instructions for any repair.