

Downloading data from TOPODRONE LiDAR

TOPODRONE 100 / 100+ / 200+ LiDARs are equipped with two ways to record data during ALS or MLS: to a MicroSD card or to the internal built-in memory. If a memory card is inserted in the TOPODRONE LiDAR, the data will be written to the memory card by default. In case the memory card is not inserted, there is not enough free space on it or it cannot be read, the TOPODRONE LiDAR will start writing data to the internal memory.

Data is written to the memory card if there is at least 6GB of free space on the memory card at the time of initialization. If the memory card initially had less than 6GB of free space or it was not available, the data recording starts by default to the internal memory of TOPODRONE LiDAR.

Downloading data from the memory card:

In order to access the ALS or MLS data of TOPODRONE LiDAR recorded on the memory card, it is enough to turn off the power of the device, wait until the LED goes out and then remove the MicroSD card. Connect the memory card to the PC directly or, if necessary, via a card reader.

Downloading data from internal memory:

In order to access the ALS or MLS data of the TOPODRONE LiDAR recorded in the internal memory, it is necessary to download them to an external USB drive using the included USB OTG Type-C adapter or a flash drive with USB Type-C connector.

Each initialization of TOPODRONE corresponds to one set of files and, accordingly, one archive with data. After connecting the external flash drive, the TOPODRONE LiDAR starts to form an archive in *.zip format for each data set. After the archive is formed, it starts to be overwritten to the external flash drive. After the archive rewriting is finished, the TOPODRONE LiDAR compares the checksums on the internal memory and on the external flash drive. If the checksums are the same, the data of the current inclusion is deleted from the internal memory of the TOPODRONE LiDAR.

Downloading data from internal memory takes much longer than from a memory card!

- 1) Make sure there is enough free space on the external flash drive to load the required data. Depending on the type of LiDAR and operating time, the size of one data set can be from 1 GB to 10 GB.
- 2) Turn on the power of the TOPODRONE LiDAR by connecting the power supply through the LEMO 6-Pin connector. If data uploading occurs immediately after performing ALS or MLS, you can skip to step 3.
- 3) Connect an external flash drive directly into the USB Type-C connector, or with a USB-OTG adapter (included).
- 4) During normal operation, the LED of TOPODRONE LiDAR will change its color to flashing crimson with increasing tone according to the indication table. Flashing crimson indicates that data is being written to the external flash drive.
- 5) When the LED of the TOPODRONE LiDAR changes its color to green with a decreasing tone, the data recording is finished.
- 6) Turn off the power of the TOPODRONE LiDAR and disconnect the external flash drive.

In case of loss of overwritten data on the external USB drive, it is impossible to unload them from the TOPODRONE LiDAR memory.

It is recommended to write off the data from the internal memory of TOPODRONE after 1-5 flights for ALS or MLS.

To reduce the waiting time, you can use the power supply for TOPODRONE through the included power supply unit from the 220V mains without the need to assemble and turn on the drone.

Data upload speed directly depends on the supported speed class and the remaining free space of the external USB flash drive, as well as the TOPODRONE LiDAR run time.

Revision #7

Created 22 October 2024 14:00:28 by Support 1

Updated 10 January 2025 12:55:31 by Tatiana