

— Survey Grade INS

Data-logging for support purpose

Operating handbook



Document
Revision

SGPOHDLS
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This brief document guides you in the process of making data logs for support purpose.

Following properly those instructions will ensure fast and efficient support.

Step 1: Configuration

Data-logging is very easy with these products, thanks to the internal data-logger.

An 8GB internal memory allows up to 48h of data to be stored internally.

Check Data-logger free space

Free space should be more than half total internal memory.

In the case you need to free some space, please click on “Erase Logs” button.

The screenshot shows the 'Information' tab of the web interface. It contains four panels: 'Device details' (Product Code: NAV30GHT-S-RU, Device Serial: 053000011, Hardware Revision: 1.0.0.0, Manufacturing Date: 09/14/18, IMU Serial: 000000000, IMU Revision: 0.0.0.0, IMU Firmware: 0.0.0.0, Up Time: 0d 00:02:48, Total Run Time: 3d 06:32:00, Power Cycles: 160), 'Firmware Details' (Firmware version: 2.1.11424-dev, Current version: 2.1.11424-dev, Upload firmware button, Firmware up to date status), 'Network' (FTP access: ftp://10.10.0.66:21, MAC Address: 96:5C:93:00:02:89, IP: 10.10.0.66, Mask: 255.255.0.0, Gateway: 10.10.0.254), and 'Internal Data Logger' (Log data: YES/NO buttons, Data logger disabled status, 7.1 GB free space bar, Begin a new session and Erase all logs buttons). A red box highlights the 'Internal Data Logger' section.

Set output logs

Configuration will be made on the web interface, in the Data Output → Data Logger section.

The screenshot shows the 'Device Settings' window with the 'Data Logger' tab selected. It contains two main sections: 'General configuration' (Output monitoring point: IMU location, Log data: ON/OFF buttons) and 'Log configuration' (Preset selection: Support, System Status: 1 Hz, Inertial Data: Disabled, ENF Euler: 50 Hz, ENF Quaternion: 50 Hz, ENF Six: 50 Hz, House: 50 Hz, Delayed House: 50 Hz, UTC: 1 Hz, GPS1 Velocity: New Data, GPS1 Position: New Data, GPS1 True Heading: New Data, GPS1 Raw data: New Data). A red box highlights the 'Support' preset selection. The left sidebar shows the navigation menu with 'Data Output' selected.

A preset selection **Support** is available to automatically select support requested outputs. Please also make sure you have selected the **IMU location** as the output monitoring point.

The output logs will be configured as defined below:

Log	Output Rate
System Status	1 Hz
IMU Short	New Data
EKF Euler	50 Hz
EKF Nav	50 Hz
Heave*	50 Hz
Delayed Heave*	50Hz
UTC	1 Hz
GPS1 Velocity	New Data
GPS1 Position	New Data
GPS1 True Heading	New Data
GPS1 Raw Data	New Data
GPS2 Velocity*	New Data
GPS2 Position*	New Data
GPS2 True Heading*	New Data
GPS2 Raw Data*	New Data
Odometer*	New Data
DVL Bottom Track*	New Data
DVL Water Layer*	New Data

** Logs must only be considered if applicable.*

Enable disable logger

Once configured, the data logger must be enabled / disabled in the information Tab or using the button on Navsight front panel if using the Navsight series, as shown here:

GeneralStatusCalibrationInformationRaw Values

Device details

Product Code	NAVSIGHT-S-RU
Device Serial	053000011
Hardware Revision	1.0.0.0
Manufacturing Date	09/14/18
IMU Serial	000000000
IMU Revision	0.0.0.0
IMU Firmware	0.0.0.0
Up Time	0d 00:14:32
Total Run Time	3d 06:44:00
Power Cycles	160

Firmware Details

Firmware version

Current version: 2.1.11424-dev

Upload firmware

✓ Firmware up to date

GNSS options

Upload license

Detected Master GPS

Show Details

Network

FTP access	ftp://10.10.0.66:21
MAC Address	98:5C:93:00:02:89
IP	10.10.0.66
Mask	255.255.0.0
Gateway	10.10.0.254

Internal Data Logger

Log data

YESNO

Data logger running - Session 4

7.3 GB free

Begin a new session

Erase all logs



After the logging session is completed, the internal data-logger can be turned off using the same buttons.

Step 2: Start the logging Run

Now the sensor is configured for data logging, you can start your operations within the nominal environments. Data-logger interface does not need any special action or connection once configured.



Warning: Please make sure you don't split the logged data into multiple sessions as only a contiguous log can be processed by the support team.

Step 3: Getting back the data

Stop first the logging.

In order to get back recorded data, connect the sensor on the network, and use a FTP client (such as FileZilla) or using windows explorer.

The screenshot displays the SBG Systems configuration interface with the following sections:

- General** (selected), Status, Calibration, Information, Raw Values
- Device details**

Product Code	NAVSIGHT-S-RU
Device Serial	053000011
Hardware Revision	1.0.0.0
Manufacturing Date	09/14/18
IMU Serial	000000000
IMU Revision	0.0.0.0
IMU Firmware	0.0.0.0
Up Time	0d 00:14:32
Total Run Time	3d 06:44:00
Power Cycles	160
- Firmware Details**
 - Firmware version: Current version: 2.1.11424-dev [Upload firmware]
 - ✓ Firmware up to date
 - GNSS options [Upload license]
 - Detected Master GPS [Show Details]
- Network**

FTP access	ftp://10.10.0.66:21
MAC Address	98:5C:93:00:02:89
IP	10.10.0.66
Mask	255.255.0.0
Gateway	10.10.0.254
- Internal Data Logger**
 - Log data: YES NO
 - Data logger running - Session 4
 - 7.3 GB free
 - [Begin a new session] [Erase all logs]

Enter the **IP address** displayed in the Information Window or type the following in Explorer address bar: <ftp://10.10.0.66> (don't forget to change the ip to match the product one).



Note: It's very convenient to have valid UTC time-stamping. It requires a GNSS system to be connected, with UTC time output.