

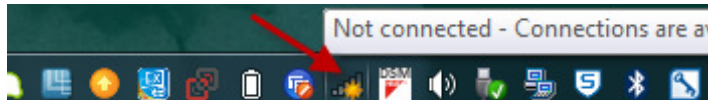
## Zenith35 OPUS Guide

Connect to the Zenith35 using the **Z35WEBMANAGER**

The GeoMax Z35WebManager (web application) is comparable to the conventional "GeoMax Assistant" that allows to configure and to modify multiple settings at the Zenith35 receiver. Furthermore data can be downloaded or receiver, radio, ME and/or GSM firmware can be uploaded.

### SEARCH FOR YOUR ZENITH35 RECEIVER

Make sure that the wireless modem on your PC is turned on and you are able to search for available "WiFi connections".



Now you can search the Zenith35 WiFi (with your PC or mobile phone) which is corresponding to the serial number of the Zenith35.



Step	Description
1.	Turn on the Zenith35 instrument.
2.	Make sure your Wi-Fi on your PC/mobile device is turned on. Search for available connections.
3.	When the instrument is found, connect it to your PC/mobile device.
4.	As soon as the connection is established, start the web browser. Enter into the address bar the IP http://192.168.10.1. A login-window pops up.
5.	Enter user name and password. The default values are: <ul style="list-style-type: none"> <li>User name: admin</li> <li>Password: password</li> </ul>
6.	After a successful login the info start screen of the Z35WebManager will appear and the instrument can be accessed.

Under Status Info-Hardware Info, check that your Receiver Firmware is 1.10.160426 or higher.

Status Info	Settings	Formatting	Updates	Data Management
Hardware Info	Position/Link Info			
<div> <div> <b>Receiver:</b>  Receiver Model: Zenith35  Receiver Equipment Number: 6804063  Receiver Hardware Version: Z35-V1.2  Receiver Kernel Version: 4.05 </div> <div> Receiver Serial Number: Z35150802002  Receiver Firmware Version: 1.10.160426  Receiver BIOS Version: 4.04  MCU Version: 1.12 </div> </div> <div> <b>GNSS (ME) Board:</b>  GNSS (ME) Model: NovAtel-OEM628  GNSS (ME) Firmware Version: OEM060620RN0000  GNSS (ME) BOOT Version: OEM060201RB0000 </div> <div> <b>GNSS (ME) Board:</b>  GNSS (ME) Serial No.: BFN15191009  GNSS (ME) Hardware Version: OEM628-2.01  GNSS Functionality: CDSR0G550 (GPS+Glonass+BeiDou,5Hz) </div> <div> <b>Antenna:</b>  Antenna Type: GMXZENITH35 </div> <div> <b>UHF Radio:</b>  Radio Model: SATEL M3-TR4  Radio Firmware Version: V07.27.2.0.8.6 </div> <div> Radio Serial No.: 1519000451  Radio Hardware Version: SPL0020d </div> <div> <b>GSM:</b>  GSM Model: Cinterion PHS8  GSM Firmware Version: REVISION 03.001 </div> <div> GSM IMEI Number: 358625050333782 </div> <div> <b>Bluetooth:</b>  Bluetooth Model: GEBW127XA </div> <div> <b>Power Status:</b>  Power Source: Internal </div> <div> Power Level: 95% </div> <div> <b>Memory Device:</b>  Used Memory: Internal Memory </div> <div> Space Information: Total 3.16 GB; Used 1.65 MB; Free 3.16 GB </div>				

Under Settings-Sensor Settings, verify the following settings:

Working Mode                      Static

Antenna Height to ARP Your measured height in meters to the base of the Zenith35 threaded mount

Point ID                      A four digit alphanumeric ID of your choice  
PDOP Threshold    Leave at default value of 99.0  
Logging Interval        1HZ  
Log Rinex File            Set to Rinex2.1  
Observer and Agency    Can leave blank  
Automatic Logging        No  
Then press "Save Settings"

Zenith35 Z35160701009    Status Info    Settings    Formatting    Updates    Data Management

Sensor Settings    Satellite Settings

Working Mode    ☒ Static    ☐ RTK Rover    ☐ RTK Base

Antenna Height to ARP    2.000    m

Point ID    0S70

PDOP Threshold    99.0    [1-99]

Logging Interval    1Hz

Log Rinex File    ☐ NO    ☒ Rinex2.1    ☐ Rinex3.02

Observer   

Agency   

NovAtel Debug Log    ☒ NO    ☐ YES

Automatic Logging    ☒ NO    ☐ YES

Save Settings

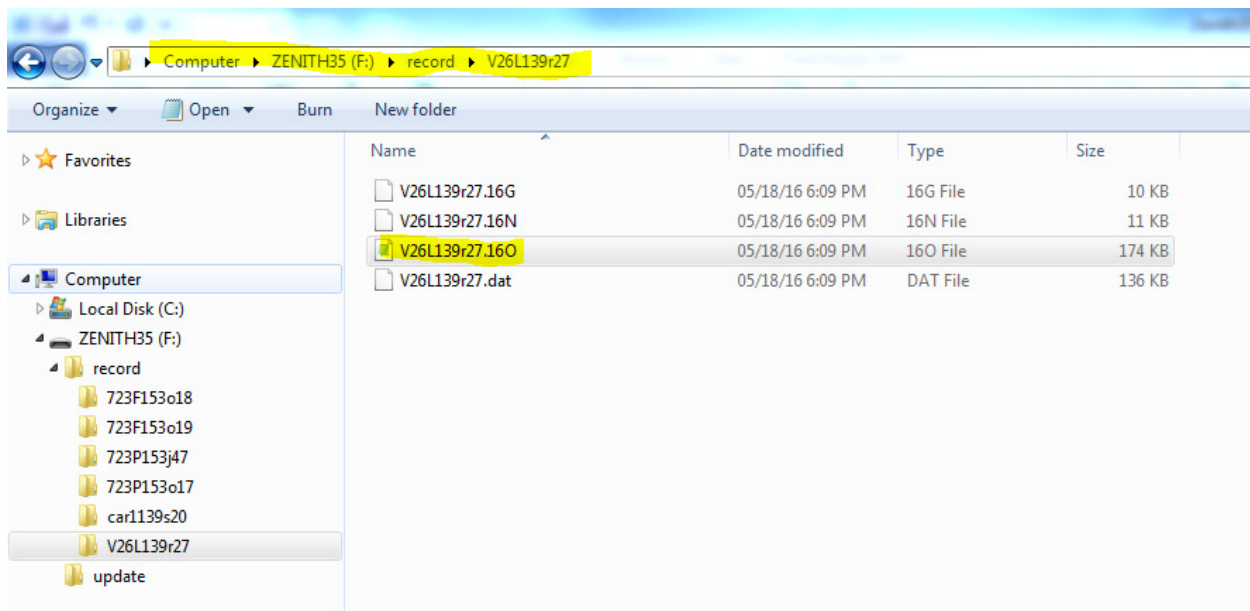
To start collecting static data, go to Status Info-Position/Link Info. Wait until receiver is tracking enough satellites, and then press "Start Recording" button and button will change to "Stop Recording". Wait 15 minutes to 2 hours for a rapid static file for OPUS, or 2 hours to 48 hours for static file for OPUS.

Status Info	Settings	Formatting	Updates	Data Management
<div>Hardware Info</div> <div>Position/Link Info</div>				
<ul style="list-style-type: none"> <li>• Current Position (lat, long, height): 36.265790826 °, -94.128852869 °, 403.393 m</li> <li>• GNSS Time: 01.07.2016, 12:58:44</li> <li>• Tracked Satellites: SUM: 11 (GPS: 7, Glonass: 3, BeiDou: 1)</li> <li>• Working Mode: Static</li> <li>• RTK Status: Navigated</li> <li>• Correction Format Type: RTCM3</li> <li>• Base ID: 0</li> <li>• DOP Values: PDOP: 2.159, HDOP:1.185, TDOP:1.261, GDOP:3.295</li> <li>• Position Quality: 3.008 m</li> <li>• Height Quality: 4.438 m</li> <li>• Datalink Status: Disconnected</li> <li>• Datalink: -</li> </ul>				
<ul style="list-style-type: none"> <li>• Default Storage: Internal Memory <ul style="list-style-type: none"> <li>• Raw Data Logging Status: No <input type="button" value="Start Recording"/></li> </ul> </li> <li>• Output NMEA Messages:</li> </ul>				

When sufficient time has passed, press the stop recording button.

- Default Storage: Internal Memory
  - Raw Data Logging Status: Yes
- Output NMEA Messages:

Connect the Zenith35 to your computer with the part number 832482 ZDC509 USB cable and browse to the folder where you stored your data. Copy and paste the .16O file to your PC on your "C" drive in a location you can find it later. The number may be different, the file with the "O" ending is the RINEX file.



Open your internet browser on your PC and go to the NGS OPUS page.

Browse your PC for the file you stored.

Select the GMXZENITH35 antenna from the list.

Enter your Antenna Height in Meters

Enter your Email address that you want the report sent to.

Press either the Rapid-Static or Static button depending on the length of occupation for your file and wait for your results to be emailed to you.

Tips: Wait 24 hours or longer after collecting your data to send it to OPUS for better results.

Make sure your Email Spam filter doesn't block the report from getting back to you.

https://www.ngs.noaa.gov/OPUS/

OPUS: the Online Positioni... X

OPUS: Online Positioning User Service

National Geodetic Survey

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projects

shared solutions

support / feedback

[ ✓ ]

new shared solution map

Reminder, a new map for shared solutions is in BETA.

To learn more, watch the webinar & give feedback. (about sharing)

click to browse map

Upload your data file.

Solve your GPS position & tie it to the National Spatial Reference System. What is OPUS? FAQs

Browse...

\* data file of dual-frequency GPS observations. sample

GMXZENITH35

NONE Internal geodetic antenna, ▼

antenna

- choosing wrong may degrade your accuracy.

2.00

meters above your mark.

antenna height

of your antenna's reference point.

SupportUS@geomax-positioning.com

\* email address

- your solution will be sent here.

Options

to customize your solution.

Upload to Rapid-Static

Upload to Static

for data 15 min. - 2 hrs.

for data 2 hrs. - 48 hrs.

\* required fields

We may use your data for internal evaluations of OPUS use, accuracy, or related research.