

- [What is the I.P. address for FPRN?](#)
- [Registration Process for using the FPRN](#)
- [What is FPRN?](#)
- [Is there a fee for using the network?](#)
- [Who can use it?](#)
- [What are the Network Terms of Use?](#)
- [What type of cell phone do you need and what provider should I use?](#)
- [How do I get access to the network?](#)
- [How can I add additional rovers or make changes to my account?](#)
- [How do I get support for my rover?](#)
- [Where can I find out more information about FPRN?](#)
- [What correction formats are available?](#)
- [Does the FPRN limit support of GPS rovers?](#)
- [Where can I get connection information?](#)
- [What is the RTK \(Real Time Kinematic\) accuracy?](#)
- [What is the established datum for FPRN?](#)
- [Where can I get a map of the stations?](#)
- [Where can I obtain a datasheet for FPRN stations?](#)

What is the I.P. address for FPRN?

The I.P. address that you will need to enter into your receiver to connect to the FPRN is 204.90.21.205. The port assignments can be determined from the <http://www.fdot.gov/geospatial/FPRNProducts.shtm> page.

Registration Process for using the FPRN

Please visit the [FPRN Registration Help page here](#).

What is FPRN?

FPRN (Florida Permanent Reference Network) is Florida's GNSS (Global Navigation Satellite System) Reference Station Network. The FDOT Permanent Reference Network (FPRN) will serve as an augmentation service to the survey engineering community by providing raw GPS data collected at reference stations statewide. The core of this project is an array of 100 or more continuously operating, dual-frequency geodetic GPS sensors. Each sensor will log raw GPS data and transmit this data to the Network Operations Center (NOC) in real time via hi-speed data network. The FPRN Operations Center will process the data from each station daily and perform system wide integrity monitoring. By monitoring the systems integrity (in real time) early detection of unhealthy stations can be detected and corrected.

Is there a fee for using the network?

Currently there are no plans to charge users for any FPRN services or products.

Who can use it?

Anyone with a network ready GPS receiver. All corrections are available thru the internet via NTRIP and TCP/IP protocols. So whether you own a Leica Geosystems rover or another make of GPS receiver you are able to gain access to the service via mobile phone technology..

What are the Network Terms of Use?

Please visit the [FPRN Terms of Use page](#) for terms and conditions.

What type of cell phone do you need and what provider should I use?

Data services are available through most of the major carriers in Florida. GPRS/EDGE (T-Mobile and AT&T) or CDMA (Verizon) services can be used. Please select the carrier that provides the most reliable coverage for your

planned area of operation. In addition to manufacturer specific cellular devices, standard cellular phones or cellular modems may also be used. To use a standard cell phone, please verify it has Bluetooth Dial-Up Networking or Wi-Fi capabilities and a data plan that is capable of "tethering".

How do I get access to the network?

You will need to create a separate account for each rover. Please visit the [FPRN Registration page](#) and complete a separate registration form for each rover. Once completed, we will activate your account within 24-48 hours. You will receive an email containing your FPRN username and password. This login is your gateway to the full suite of FPRN services including both real-time corrections and RINEX data files.

How can I add additional rovers or make changes to my account?

You will need to create a separate account for each rover. Please visit the <http://204.90.21.205/sbc/Account/register>.

To make any changes to your existing account please re-visit the FPRN Registration page and enter the username and password you were supplied. You can change any item in the contact information page except for the user name. Should you need to change your user name please contact [the FPRN Support Team directly](#).

How do I get support for my rover?

We are an email or phone call away. We will make every attempt to assist with the configuration of your rover. The [FPRN Help page](#) has multiple articles on configuration.

Where can I find out more information about FPRN?

Please visit the [FPRN page](#) for additional information!.

Is there a fee for using the network?

Currently there are no plans to charge users for any FPRN services or products.

What correction formats are available?

Standard formats include:

SINGLE BASELINE: RTCM 2.3, RTCM 3.1, CMR+, RTCM3 MSM4, RTCM3

VRS: RTCM 2.3, RTCM 3.1, CMR+, RTCM3 MSM4, RTCM3

MAX: RTCM 2.3, RTCM 3.1, CMR+

iMAX: RTCM 2.3, RTCM 3.1, CMR+, RTCM3 MSM4, RTCM3

FKP: RTCM 2.3.

Does the FPRN limit support of GPS rovers?

Absolutely NOT! We go out of our way to provide corrections to ANY sensor that has the means to receive RTN data, regardless of brand or age.

Where can I get connection information?

New connection information for your particular rover and a complete list of all real time products will be available soon. Contact FPRN support staff for more information.

What is the RTK (Real Time Kinematic) accuracy?

Assuming the standard GPS RTK protocols and best practice methods are employed for maximum precision i.e. good satellite coverage, good geometry of precisions, low multi path environments etc., FPRN typically achieves an RTK accuracy of 1-2 cm horizontally and 2-3 cm height.

What is the established datum for FPRN?

Before August 2, 2014:

NAD(83)-(CORS96)-(Epoch 2002.0000).

After August 2, 2014:

NAD(83)-(2011)-(Epoch 2010.0000).

The FDOT maintains and publishes universal coordinates (geocentric polar and Cartesian) for the Florida Permanent Reference Network (FPRN) as we must deal with one coordinate system for the entire state. We leave it up to the end user to translate our universal coordinates into whichever State Plane (SP), Universal Transverse Mercator (UTM), or other projection that is appropriate for his or her use. Today, virtually all vendor-supplied GPS processor packages come with projection translators that can be tailored to one's particular needs. The National Geodetic Survey (NGS) also makes available translators at their web site for producing state plane coordinates from geocentric coordinates such as those published for the FPRN.

The old and new FPRN geocentric coordinates are based on the same ellipsoid which is GRS1980. This is the ellipsoid on which all North America Datum of 1983 (NAD83) coordinates are based. Therefore you can use the same projection translator for the old and new FPRN universal coordinates for your comparison at specific locations. The FDOT does not have the resources to provide specific projection comparisons for specific sites as each site (be it FPRN station or other control) can have multiple projection coordinates associated with it. We leave that exercise of producing projected plane coordinates up to the end user.

[Link to current and superseded control list in pdf format.](#)

Where can I get a map of the stations?

Please visit the dynamic map website [www.http://www.fdot.gov/geospatial/fprnstat/index.html](http://www.fdot.gov/geospatial/fprnstat/index.html) for location and station status information. Information about the station status is updated every day.

Where can I obtain a datasheet for FPRN stations?

From the [FPRN datasheets](#) page.