



## **KEY FEATURES**

- Support calculation with any combination of the GPS, GLONASS, BeiDou
- Support GNSS receivers from a variety of manufactures
- Adopt distributed deployment, three standalone software can be installed separately to mitigate the operating pressure of large CORS
- Intelligent online quality control
- Vivid map display, monitor your network performance and status intuitively

## **CHC** | Reference Station Network

Powerful CORS Calculation Software

The CHC Reference Station Network (CRNet) software is a new version of distributed CORS software released by CHC which is compatible with BeiDou and suitable for large scale CORS service. With the optimized analysis of major systematic errors, like ionospheric, tropospheric, orbit and multi-path errors, the establishment of the delay error models, like ionospheric and tropospheric delay, the users are provided with optimized spatial error correction, and then the more reliable and precise CORS service will be supplied with the improvements.

CRNet is composed by CHCStream data stream software, CRNet core calculation software and CHCCaster distribution service software.

- ► Calculate the raw data of different brand products, like Trimble, NovAtel, Topcon, etc
- ► Support various correction format: RTCM2.3, RTCM3.0, RTCM3.1, RTCM3.2, CMR, CMRx
- ▶ Advanced core similar VRS processing engine that can accurately estimate the air model of regional ionosphere and troposphere
- ▶ Achieve real-time intelligent analysis for the raw data
- ► Software Cloud service



# **Technical Specifications**

#### Coverage

- Navigation: 100 km range of reference station
- Real-time positioning: 15 km range of reference station

## **Positioning Accuracy**

- Dynamic reference
  - Geocentric coordinate component: < 0.05 m
  - Baseline vector component: < 3 X 10<sup>-8</sup> m
- Real-time positioning
  - Horizontal: < 3 cm
  - Vertical: < 5 cm</li>
- Navigation: 1-2 cm

## **Availability**

• For navigation and positioning: 95%

## Compatibility

- · Satellite signals
  - GPS: L1, L2
  - GLONASS: L1, L2
  - BDS: B1, B2, B3
- Correction data: RTCM2.3, RTCM3.0, RTCM3.1, RTCM3.2, CMR, CMRx, RTD
- Receivers: GPS and GNSS receivers from mainstream manufactures

## **Database**

- ACCESS
  - 32-bit CRNet
  - Recommended: Less than 50 stations for single subnet
- SQL Server
  - 32-bit & 64-bit CRNet
  - Recommended: Less than 120 stations for single subnet

## Communication

- Protocols
  - TCP Server
  - TCP Client
  - UDP Server
  - Ntrip

## **Operation System**

- Microsoft Windows 7, 32-bit and 64-bit
- Microsoft Windows 8/8.1, 32-bit and 64-bit
- Microsoft Windows Server 2008, 32-bit and 64-bit
- Microsoft Windows Server 2012

#### **Processor**

- For less than 20 stations
  - Recommended: Dual core processor at least
- For more than 20 stations
  - Recommended: Quad core processor at least

## Random Access Memory (RAM)

- Depend on the number of stations
- Recommended
  - Less than 10 stations: 2 GB or more
  - Less than 50 stations: 8 GB or more
  - Less than 120 stations: 16 GB or more

#### **Hard Disk**

- Free disk space about 200 MB for software installation
- Additional space for archiving data (usually need about 150 MB for one-day raw data (in Rinex format) of one station)

## License

USB dongle

## **Installation Prerequisites**

- Microsoft .Net Framework 3.5
- Microsoft .Net Framework 4.0
- Microsoft Visual C++
- USB dongle driver

## **Supported Language**

- Chinese
- English
- French
- Russian

Specifications are subject to change without notice.

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