

SGS100 DGS100

mmVu® GNSS Monitoring Stations



GNT's GNSS stations are used to monitor points of interest or serve as reference stations. GNT's GNSS stations incorporate a geodetic quality GNSS receiver and antenna, a wired and wireless Ethernet-to-serial device server and an optional high-volume data logger. GNT offers two types of GNSS stations, SGS100 for single-frequency GNSS stations and DGS100 for dual-frequency GNSS stations.

Features

GNT's GNSS stations provides the following capabilities:

- Real-time GNSS data transmission to the PS100 Local Server computer
- Real-time GNSS data logging
- Remote access and control of the data logger and GNSS receiver
- Ethernet communications via a wired and/or wireless network
- Configurability to work with AC or DC power sources

Communications

The SGS100 and DGS100 communicate with the PS100 over a wired or wireless local area network. The wireless option allows users to simplify the installation of a monitored station in challenging environments. For applications where Internet communications do not exist, GNT can implement local network infrastructure to facilitate on site data streaming.

Data Handling

The SGS100 and DGS100 transmit data to the PS100 for real-time processing. When continuous data is a priority, GNSS data can also be simultaneously stored locally by utilizing the SGS100 or DGS100 data logger option. Users can access the data logger remotely to download the stored data anytime.

Field Ready

The SGS100 and DGS100 come preconfigured and ready for installation. Settings may be customized for individual applications. The SGS100 or DGS100 and its antenna mounting hardware are also available.

Other GNSS Station Components

All components have been carefully selected to ensure the highest performance and reliability, resilience in outdoor environments and low power consumption.



Dual-frequency GNSS Receiver Specifications

Signal Tracking	SGS100: GPS L1, DGS100: GPS L1/L2
Communication	2 RS-232 serial port
Raw Data Rate	1 Hz (max. 50 Hz)

Dual-frequency GNSS Antenna Specifications

3dB Pass Band	L1 1588.5 ± 23.0 MHz (typical)
	L2 1236 ± 18.3 MHz (typical)
LNA Gain	29 dB (typical)
Noise Figure	2.0 dB (typical)
L1/L2 Phase Center	Zero offset