

mmVu[®] Landslide Synergizer

GNSS Landslide Monitoring System



mmVu[®] Landslide Synergizer is a unique, complicated GNSS deformation monitoring system package for real-time, landslide or unstable slope monitoring applications. It monitors the deformation of unstable slopes by processing single-frequency GNSS monitored baselines and at the same time, controls the stability of reference stations by processing dual-frequency GNSS reference baselines. The mmVu[®] Landslide Synergizer is designed to satisfy various requirements from landslide or unstable slope monitoring applications by enhancing flexibility and scalability of the applications. It offers a reliable and cost-effective solution for either a small or large scale landslide or unstable slope monitoring needs.

Features

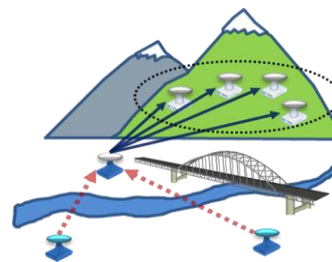
- Optimized, cost-effective system package for either small or large scale landslide and unstable slope monitoring applications with up to 10 km monitored baselines
- Controls the stability of the local reference stations
- Provides TDD and DDC solutions for both single- and dual-frequency GNSS receivers with adjustable filter combinations
- Supports the use of third party Continuously Operating Reference Stations (CORS) or global reference stations available within 100 km from the project site
- Detects sudden displacements and long-term stability trends
- Provides mm-level deformation detection and sub-mm level trend monitoring
- Designed to overcome GNSS challenges such as multipath, ionospheric and tropospheric errors
- Archives solutions, observations, and server activity
- Supports structure specific coordinate system
- Built-in system Integrity Monitoring Services
- Supports multiple input data formats from various GNSS receivers including RTCM version 3.1
- Supports Networked Transport of RTCM via Internet Protocol (NTRIP)





System Components and Specifications




Hardware Components	GNSS Station	Reference: 1 x DGS100 Monitored: 4 x SGS100
	Server computer	PS100 Basic
Software Components	Real-time processing	mmVu [®] Synergizer Basic
	IMS module	mmVu [®] IMS Basic
Communication		Wireless, wired or cable (Option)
Specifications		MBL: up to 5km/RBL: up to 100km
		No. of MBL: 4 / No. of RBL: 2 Accuracy: mm level

System Deployment Diagram



- Deformation zone is monitored by single-frequency GNSS receivers in a project site.
- Dual-frequency local reference station is located outside of the deformation zone.
- Local reference station position is controlled using CORS or global reference stations.

	Monitored baselines (MBL) (up to 5km)
	Reference baselines (RBL) (up to 50km)

	Monitored stations (Single-frequency)
	Local reference station (Dual-frequency)
	Global reference stations (Dual-frequency)