Deformation Monitoring System
Delta Solutions

Complete Autonomous
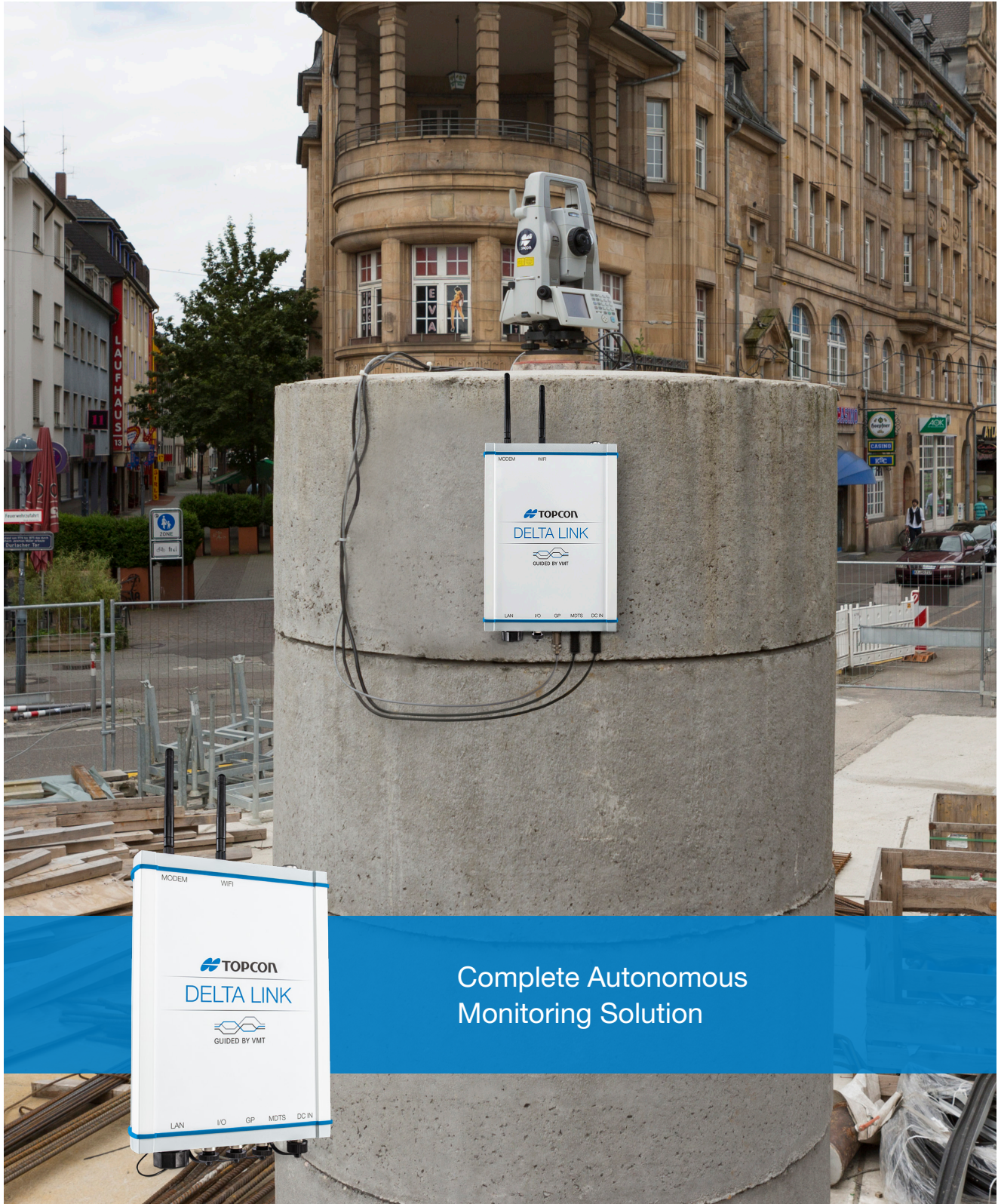Monitoring Solution

Geosensor Networks Made Easy
Delta Solutions

Topcon Delta Link Controllers

Topcon Delta Link controllers provide hardware support for autonomous operation in the field. Communication options include Ethernet, Wi-Fi, and a globally approved integrated cellular modem (data SIM provided by third-parties). The standard configuration comes with a basic weather station recording temperature, barometric pressure and humidity for active PPM corrections if required.

Topcon Delta Log

Accessed via a secure web portal, Delta Log provides an intuitive interface to manage observations, target types, and measurement scheduling. Delta Log provides a simple platform for advanced functionality – unique Topcon features such as matrix detection are instinctively controlled through the software.

Data Continuity

Delta Log will continue to operate the total station and to collect data if communication with the Delta Watch database fails. Once communication has been restored, data is synchronized and the main database is updated. No loss of data ensures continuity in the representation and reporting of deformation information. With complete data sets, a thorough understanding of the asset in focus can be determined.

High-flexibility through the recording and processing of motorized total station and environmental sensor data

Integrated communications for remote connectivity

Network adjustment and analysis with automated quality control including elimination of outliers

Scalable and robust hardware

Reporting, visualization and alarm features

Topcon Delta Watch - A modular solution for data processing, administration and visualisation

Delta Watch software provides a modular solution to monitor, manage and evaluate automatic and/or manual monitoring data as well as optionally trigger alarms. Data from robotic total stations, GNSS receivers, leveling devices, and a variety of geotechnical and structural sensors can be processed and analyzed individually or as a network-adjusted solution.

As standalone software, Delta Watch delivers accurate and reliable data in a variety of reporting formats to best fit a project's needs. Alternatively, Delta Watch can feed processed data to third-party visualization software to provide system integration capability in large monitoring projects, either via data exports or the RESTful API interface. Network adjustments are carried out using modern and robust least-squares techniques with all results available for analysis within Delta Watch. With an optional Delta Sense module, Delta Watch can import data from other sensors such as Senceive and Loadsensing wireless sensor nodes.

Alerting project events

Should measurements exceed project alert thresholds, notifications are distributed via email or SMS message. Customizable reports are distributed on a schedule.

Data visualisation with Delta Live!

Delta Live! web application enables remote access to the data processed by Delta Watch and makes the results of monitoring data available to other groups of people in a simple and clear form – for example clients, designers, construction supervision or asset owners.

Topcon MS AXII

- Angular accuracy option of either 0.5" or 1"
- Reliable distance accuracy of 0.5 mm
- Automated matrix detection and target acquisition
- TSshield™ total station management system

Customizable
Modular Solution

Topcon Delta Link

- Autonomous operation in the field
- Various on-board communication methods
- Powered by a single 24 DC input (Delta Link v2.0) or AC mains combined with an external backup battery (Delta Link v1.0)
- External environmental sensor

Topcon Delta Watch

- Core software performs computations, alerts and customized reports
- Observe, assess, and manage risk
- Import data with a Delta Sense module
- Easy access via Delta Live! web application
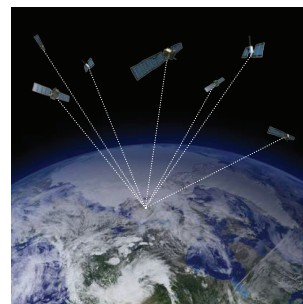- Modular solution that grows with you as your projects evolve

Topcon Delta Log

- Standard within Delta Link hardware
- Set observation parameters
- Start and stop sessions
- Remote management services

Topcon Delta Sat

- Optional software module to Delta Watch product
- Include GNSS observations with monitoring projects
- Allows for combination of GNSS and total station network adjustments

Guided by VMT

Guided by VMT features the best-selling navigation systems in tunneling worldwide. Since 1994, VMT has equipped thousands of tunneling projects with navigation, information, monitoring, and communication systems.

www.topconpositioning.com/delta