

CYCLOPS

SolData and IGN, the French National Geographical Institute have co-developed a new concept in automated monitoring using motorised optical instrumentation.

CYCLOPS is a fully automated surveillance system comprising a motorised total station with video target acquisition under computer control. The system unites the latest developments in motorised total station technology with Sol Data's software to create an extremely powerful, versatile and user friendly monitoring solution.

CYCLOPS can be used to monitor structures for settlement, displacement, convergence, deformation and verticality. It has been used on contracts all over the world, and is fast becoming the accepted method for modern day real-time monitoring.

Applications include settlement monitoring, tunnel monitoring, structure deformation monitoring, slope stability monitoring to name a few.

Incorporating corrective calculation sequences to compensate for self movement of the instrument, and changes in temperature and atmospheric pressure, CYCLOPS provides absolute real time movement measurement.

Usual technical questions :

Cyclops is working day and night without lighting of structures.
 Cyclops measurement time per target is around 12 s.
 Absolute movement of targets are given in X,Y and Z..
 Usual number of targets 50 u.
 Target fixing : Screwed or glued.
 Protection : Cyclops is installed with special protective Helmet .
 Information is visualised in real time thanks to SolData GW visualisation software.



- Cyclops : typical configuration -

CYCLOPS
Measurement range = 0 to 500 m
<ul style="list-style-type: none"> • Accuracy depends on : Optical instrument (Several total station are available) Stability of reference scheme • Usual site accuracy : +/- 0,5 mm at 60 m • Longer range and higher accuracy are possible Please refer to CYCLOPS Evolution