DMS Tilt

Sensor
- Self-compensated
- MEMS inclinometer
- Thermistor

Temp. operating range
from -30°C to +70°C

Number of axes
Biaxial

Power supply
5v

Measuring range
±2.5% , ±5% , ±10%

Protection
IP66

Accuracy
±0.006° for ±5° range

MODELS
0DMS2TILT10

DMS Gateway

Memory
512MB LPDDR2 SDRAM

Network interfaces
Integrated 3G /4G Modem & Antenna (HSDPA,EDGE,GPRS)
quad band Ethernet over USB 2.0

Long range RF Module
ISM Band 902 – 928MHz @ 14dBm

MODELS
0DMS0GWLOG

Battery Life Time

Number of Batteries	Expected Battery Life		
	5 min Sampling	15 min Sampling	1 hour Sampling
1	6 months	2 years	5 years
2	6 months	2 years	5 years

DMS
Data Mobile Solution

- **DMS Analogue**

- **DMS Vibrating Wire**

- **DMS Digital**

- **DMS Tilt**

- **DMS Gateway**

Data Mobile Solution is a complete wireless solution for automatic monitoring of geotechnical and structural instruments.
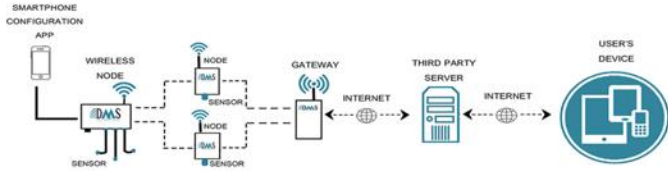
- Long-range communication of over 15 km
- Truly low-power, 5 years of unattended runtime
- Remotely monitor hard - to - access infrastructures
- Eliminate the need for manpower
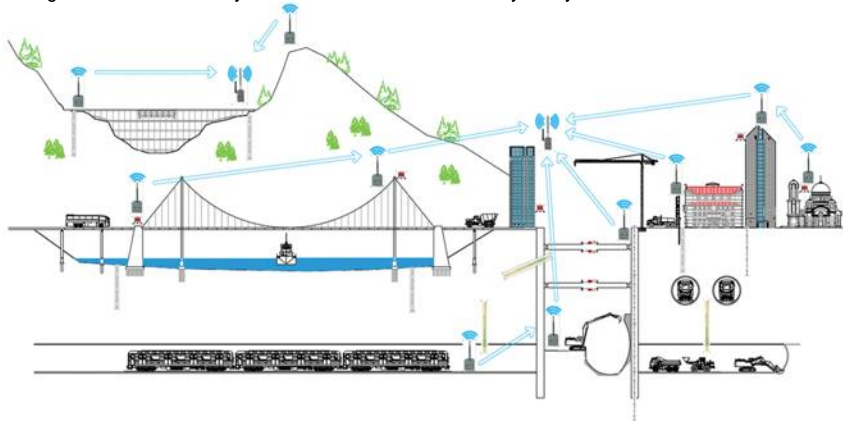- User - friendly web software

Data Mobile Solution

DMS (Data Mobile Solution) is composed of a number of nodes to which instruments are connected, and a gateway communicating with nodes through long range radio. Nodes are configured through an Android APP while the gateway have a web server on-board for the set up.

Why use Mesh?

Even if a Node can't reach the Gateway directly, it can still send its data to the gateway via other Nodes in the network. This is possible with DMS Mesh, a patent-pending, wirelessmesh data collection protocol that ensures reliable sensor data collection even in the harshest of environments. like in deep tunnels and very large construction sites without using numerous gateways and signal amplifiers.It automatically mitigates well-known wireless problems like signal blockages and interference, allowing the Nodes to reliably send their data to the Gateway every time.

Moreover, DMS is a low power utilization framework that can reach up to 5 years battery life. The gateway can push data on a FTP server; remote connection to gateway is allowed for data download and set up.

15 km
in line-of-sight environments

3 km
in tunnels and underground setting

4 km
in cities and urban environments

DMS Analogue

Type of measurement
- Voltage (Uni-axial) (mono and Biaxial)
- 4-20 mA Current loop (2 wires)(2 sensors)
- 4-20 mA Current loop (3-4 wires)(1 sensor)
- Thermistor
- Wheatstone Bridge (6 wires)

Accuracy
Voltage   ±0.05%   FS
Current Loop   0.05%   FS
Potentiometric   ±0.025% FS
Wheatstone bridge ±0.1%   FS

Operating temperature
-30 to +70°C

Protection
IP66

Measuring range
±5VDC to 1.25, 4-20 mA

Power Supply
5v/12v/24v

MODELS
0DMS0AN01   1 channel
0DMS0AN04   4 channels

DMS Vibrating Wire

Type of measurement
- Vibrating wire sensor
- Thermistor

Accuracy
(-40° to +85°C) 0.015% FS

Measuring range
300 Hz to 8000Hz

Operating temperature
-30 to +70°C

Protection
IP66

MODELS
0DMS0VW01   1 channel
0DMS0VW08   8 channels

DMS Digital

Digital Inputs
- RS232 Serial Port
- RS485 Full/ Half Duplex Serial Port
- 2 SDI-12 Bidirectional Ports or Programmable interrupt driven GPIO
- Digital communication supported sensors

Operating temperature
-30 to +70°C

Protection
IP66

MODELS
0DMS0DG03 three protocols ports