IS-system

A new standard in geotechnical monitoring

Imagine: up to 100 measurement points within 1 network interconnected with just one cable. Via a GSM-connection you can directly fetch the measurement results wherever you are, enabling you to closely follow your project. Impossible? With the fully digital Profound IS-system you can actually monitor your project at a distance.

Simple

The IS-system is custom-made for every project. Installation and expansion of an IS-network are simple: just one network cable interconnects the sensors and the network computer whereby the distance between measurement points can be hundreds of meters.

Ultramodern

After starting up the network PC automatically detects the sensors attached and the sensors will start measuring according to the preset interval. The measurement results are sent to the central PC where you can directly view them. If you equip the IS-network with a GSM-connection, you will also be able to view the data at a distance at any moment.

Flexible

You can quickly and easily process, export and graphically present the measurement results on your Windows PC.

Efficient

Without difficult conversion factors every 'Intelligent Sensor' immediately gives the measured values in the correct unit. The sensors can also carry out simple data processing like calculating the minimum, maximum and average values.
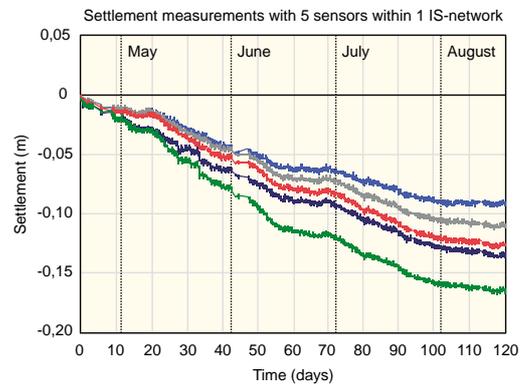
Monitoring projects continuously and meanwhile downloading and graphically displaying the measurement results on your own PC as often as you want.
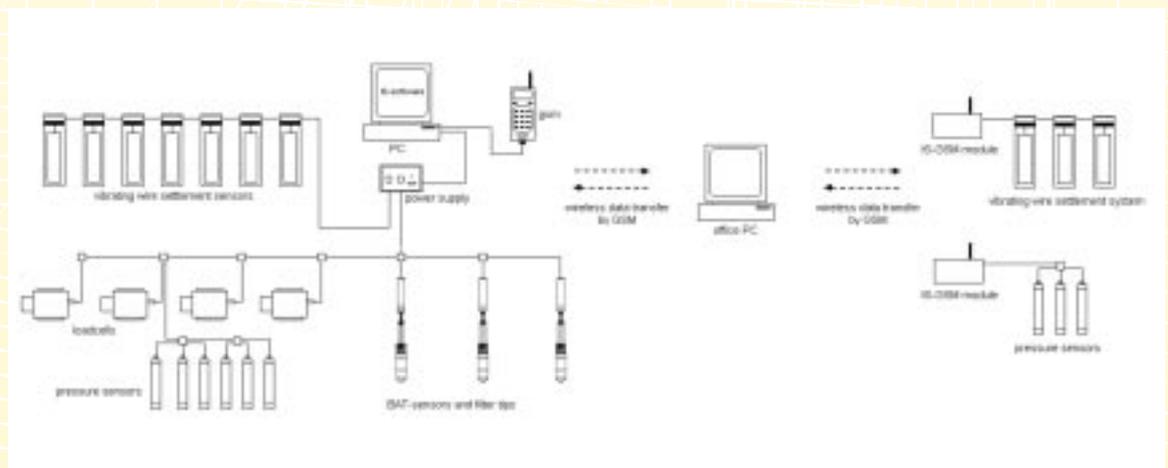
The IS-system is custom-made for every project. Depending on the required measurement locations different systems are designed, as shown above. After installation of the network, you directly transfer the measured data in the correct unit to your office PC where you can view them without any further conversion.

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Stand-alone
Every IS-sensor is equipped with a data logger.
So you cannot only use the sensor in an IS-network, but also stand-alone. With a Windows laptop and an IS-RS232 converter you can easily program the sensor and read out data later on. An advanced alternative is the IS-field unit: a compact and robust hand-held computer.

Reliable
All relevant parameters, like sensor type, calibration and scale factors have been stored in the memory of the IS-sensor. You only have to set measuring frequency in the network PC and the PC will collect the measured values accordingly.

Cost-effective
The IS-system combines existing, economical interesting techniques like GSM and standard cable work with advanced network technology. Other advantages are the fast, simple installation, the digital administration and the minimal time and effort necessary to frequently read out so many sensors.

Custom-made
Feel free to contact one of our consultants to further discuss the possibilities of the IS-system for your project.
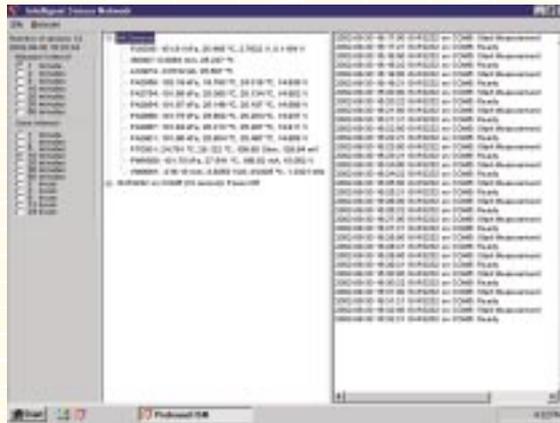
With the IS-network software you can directly view measurement results on your own PC.

Technical specifications

Network protocol	:	CAN-protocol (Control Area Network)
Total cable length	:	≈ 2,500 meters
4-wire cable system	:	Wire 1: 15 volt (max. 18 volt) not stabilised
		Wire 2: 0 (mass)
		Wire 3: digital (CAN differential)
		Wire 4: digital, inverse of wire 3 (CAN differential)
Max. sensors	:	≈ 100
Sensor types	:	Groundwater level sensors to be used in standpipes
		Inclinometers
		Load sensors
		Potentiometers
		Pore pressure sensors, e.g. the BAT®-system
		Pressure sensors
		Vibrating wire sensors
		(Vibrating wire) water level system
Accessories	:	IS-PC Power supply
		IS-battery holder
		IS-field unit
		IS-RS232 converter
		IS-data logger software
		IS-network software
		IS-process software
		IS-GSM module