



WD400 Wireless System

Technical features

WD400 system collects the needs and the experience of years of monitoring systems for structural and geotechnical applications.

The local data logger unifies the need of:



High resolution (16 bits);

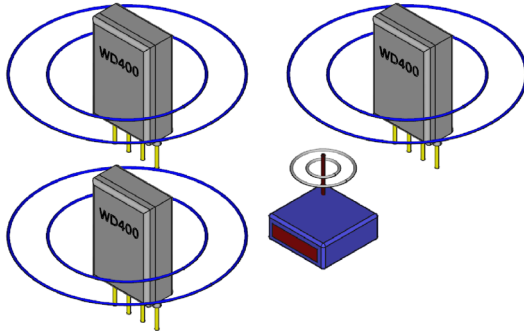
- Flexible inputs (+/-2V, +/-10V, 4-20 mA, ratio metric);
- Low power in stand by mode (< 10µA);
- Standard batteries utilization (4 x Size D alkaline);
- Long range.

The gateway is provided with:

- SD card;
- Ethernet,
- USB connectivity.

Applications

Structural and geotechnical monitoring



Compatible Instrumentation

- Electrical piezometers
- In place inclinometers, tilt meter, tilt beams,
- MEMS sensors, servo-accelerometers
- Crack meters,
- Wire extensometers,
- Potentiometers 4-20mA
- Thermometers,
- Level systems, Load cells
- Rod extensometers.

Installation



- Gateway and local unit transmission is cripte by Lora tecnology. Sd card remotly data acces and OtrMonitoring web site fit the product with all the previous Otr transmission technology. Datas should be trasmitted using ASCII's file to all FTP in an indipendent and safety way without manufacturer communication. The local unit works with 4 classic alkanin battery using an internal sistem allowing to use the discharge curve of the commercial battery. Validation distances makes the sistem suittable to the monit of wide worksite or city centers' entire blocks.

Related Instrumentation

- OtrMonitoring web site
- Piezometers
- Inclinometers
- Thermometers
- Crack-meters
- In place inclinometers



Technical Specification



WD 400 Local Unit



Gateway

Stand by current <10 micro ampere, Inputs +/-2.048 / +/- 10V, 0-20 mA, 4-20 mA, mV/V

Sensor supply 15Vdc (15Vdc, 2,048 V ratio metric), 4 x 16bit inputs

USB local port, Radio 868 MHz a 10 mW, Range >> 200 m in urban environment, >> 1 Km in open field, Data Encryption

Internal RTC synchronized, Box IP65, UL94-HB 165x115 mm

Internal module certified R&TTE,

Supply with 4 standard batteries size D alkaline
Autonomy > 1 year with 4-20 mA sensors @ 24 measures per day,
> 2 years with natural output sensors @ 24 measures per day

RTC interno configurati con web

Biaxial inclinometer +/-5° embedded on demand

Internal NTC thermometers

Configuration of : scan interval; preheating; start time; physical units of outputs, sensor identification;direct measure...

Ethernet, HDSP/3G/GPRS connectivity

Linux operative system

SD card

Data transmission on normal FTP

Compatible with OtrMonitoring

Certifications EU: EN 55022 Class B, EN 55024

Included power supply

Aluminium box

Antenna 868 MHz and 3G/HDSPA included

Email and SMS alert

Own software and function costumization on Linux sistem



Codes & Part Numbers

P/N 2016000
P/N 2016001

Datalogger radio LORA WD400, 4 input + Temperature and Battery Voltage
Gateway Lora