Emalte Dam Structure Monitoring Instrumentation

V-NOTCH SEEPAGE WEIRS





ABOUT

- V-Notch is used for water seepage monitor- ing at the dam wall structure.
- V-Notch can be also used for dam reservoir water level monitoring and catchment water level monitoring
- The basic principle is that discharge is directly related to the water depth above the crotch (bottom) of the V; this distance is called head (h).
- The V-notch design causes small changes in discharge to have a large change in depth allowing more accurate head measurement than with a rectangular weir.

SPECIFICATIONS

- Automatic Water Level Recorder System
- WL61 Radar Sensor 1m range and 10m of cable.
- Bracket included.
- Data logger CR800, CD295 display and program.
- Stainless Steel cabinet with 30 degree slop-ing roof, side vents.
- Security door switch.
- Solar Power supply.
- · Drawings and manual included
- Telemetry options include: GSM, Satellite, Radio Transmission, RS485 or Fibre Optic cable

FEATURES

- Vega WL61 Radar type water level sensor V-Notch Frame
- AL-131 with Campbell Scientific Data Log- ger, GSM or Radio Telemetry package Solar power equipped
- Ability to connect mutiple sensors to one data logger

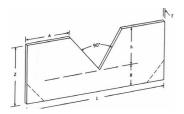
RADAR SENSOR:

The VEGAPULS WL S 61 uses radar sensor for continuous level measurement of water and wastewater and is the ideal sensor for all typical application in water and waste water. It is particularly suitable for level measurement in the water processing, in pump stations and overflow basins.



Radar Sensor The VEGAPULS WL61

The V-notch design



Data Logger Campbell Scientific CR300



Telemetry Options Cable



Radio



Provide full details of your rainfall monitoring requirements and we will tailor engineer the most appropriate system for you.





Automatic Pore Pressure Recording System Al -131-VWP



Gecko SMA-HR Strong Motion Accelerograph

ABOUT

- A sensor is positioned deep into the ground to mea- sure pore water pressure in the dam.
- The data logger sends signal to the pressure plate which can detect the port water pressure.
- The data logger records the neasured pore water pressure sensed by the vibrating wire piezometers (VWP)
- The calibration factors are programmed into the data logger for each VWP.
- The data is stored locally and can be view on the enclosure front door mounted display screen.
- Data is acquired by the Supervisory Control and Data Acquisition System software application EM1000 via GSM or Radio Telemetry.

FEATURES

- VWP can system include 1 or 2 multiplexers depend- ing on the number of VWP's and whether 2 wire or 4 wire.
- One multiplexer caters for 16 VWPS including pres- sure and temperature monitoring (4 wires).
- One multiplexer caters for 32 VWPS if only pressure and 2 wires.
- System is designed for AC power.
- Up to 22 VWPS's (4 wires) or 44 VWPS (2 wires)
- Up to 38 VWPS's (4 wires) or 64 VWPS (2 wires)

SPECIFICATIONS

- Automatic VWP System complete with AM16/32 Multiplexer.
- · Data logger CR6 with program display.
- IP66 Stainless Steel cabinet, side vents.
- · Security door switch.
- · AC supply with surge protection.
- · Drawings and manual included.
- Includes GSM Telemetry or Radio Telemetry

ABOUT:

For structural monitoring of your dam, power station building, or any asset at risk of **earthquake damage** You can install multiple Seismic Monitoring Alarms to record synchronised response of status of structure

FEATURES:

- Use the Seismic Alarm to record events and trigger its own control system
- Set trigger level as a percentate of full scale, or to a ratio of change in average signal level

SPECIFICATIONS:

- 24-bit ADC
- up to 2kHz sampling
- Internal triaxial ±2g accelerometer Locked to absolute time using GPS USB data storage
- Continuous recording
- Absolute Level triggered recording Average Signal Level triggering Ethernet for remote web login Optional LCD panel & keypad Optional internal battery
- · Optional alarm outputs
- · Bolts to wall or floor
- Includes mounting plate & toookit

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