LEAS - IRD

CITYSHARK II

MULTICHANNELS ACQUISITION STATION

The product

Applications :

- **Earthquake and civil engineering.**
- **Seismic zonation**
- **Site response studies.**
- **Microtremor studies.**

Advantages

Function
- With 18 channels, Cityshark ll is a numerous sensors recording station dedicated to ambient noise (microtremors) recording for site and building response studies.

Setting up
- The major advantage of the Cityshark ll is its complete synchronisation of all the sensors.
- Direct set up on the station with buttons without neither PC nor external box..
- Internal clock with TCXO 1.5ppm and synchronise by GPS receiver in standart.

Flexibility
- The equipment will fall in with the CE norms. Its major performances are : large storage, user friendly, flexibility, lightness, rapidity...
This product is the result of a collaboration between LEAS, the University and IRD.

Distributor

Technical characteristics

Electrical

- Voltage :   Internal 12,6 Volts DC (with possibility of complementary external battery).
- Consumption :   140 mA without GPS, without sensor
  200 mA without sensor.
- Internal battery range : 16 – 20 hours.
- Auto power off mode in case of low battery (<10V).
- Analog input :   18 channels (differential inputs).
- Amplificator gain :   selectable gains 2^0 - 2^{13}.
- ADC :   24 bits Delta Sigma.
- Dynamic range :   108 dB at 100Hz.
  90 dB at 250 Hz.
- Sample rate :   5 selectable rates (50, 100, 125, 200, 250 Hz).

Mechanical

- Dimensions :   420 x 335 x 180 mm.
- Weight :   10 kg.
- Temperature range :   -10°C / + 55°C.
- Housing :   IP 65 poly-carbonat case
- I / O :   - 6 sensor inputs with 12 volts power supply for activ sensors
  - 1 external power supply and battery charger
  - 1 RS_232
  - 1 GPS antena
- Connectors :   waterproof Souriau 851 type.
- Leak tightness :   IP65

Use

Recording modes

- Recording windows : 1 - 60 minutes.
- Recording time frequency (0 - 12 hours).

Storage

- Extractable flash card 128 MB : storage capacity of 6 hours at 100 Hz (uncompressed data). PCMCIA compatibility.

Communication

- Parameters :   - Gain,
  - Sample rate,
  - Storage duration,
  - Cycled recording at chosen time intervals.
- Control led :   - Recording in progress.
- Software provided :   - "Citysha", transfer software from flash card to PC, ending data in Excel format.
- Built in four lines display.
- Noise level display
- Low battery detection

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