IRIS INSTRUMENTS

I-FULLWAVER

I-Fullwaver, compact recorder for full wave signal

IP FULLWAVE RECORD

For advanced processing

MINERAL EXPLORATION

- **Recording injected current**
- **Several weeks recording**
- **Time stamped data**

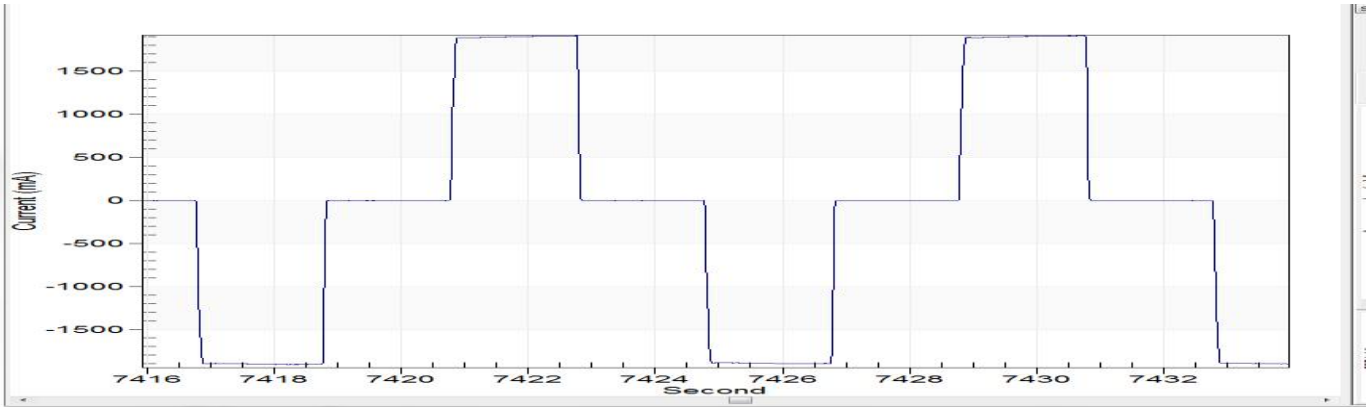
I-Fullwaver: this logger for electrical signal is a new concept of compact and low consumption unit designed for advanced Time Domain Induced Polarization, Resistivity and SP measurements. It can work in all field conditions, small, discrete, autonomous and can record continuously without operator. I-Fullwaver is connected in series on the AB injection line, it measures and logs very accurately the injected current IAB.

Compactness: light, discrete and easy to setup on the field, even on remote areas. This autonomous logger does not need any operator during the acquisition. I-Fullwaver is connected close to the transmitter or close to any injection electrode.

Integrated GPS: an integrated gps, very accurate and providing PPS signal (one pulse per second) allows to store all time series with time information. This is crucial to correlate and process data with V-Fullwaver receiver loggers installed in a same area. This information displays the behaviour of the transmitter, its regulation specifications and the value of Iab in order to compute accurately the apparent resistivity.

High resolution: samples are recorded every 10 (ten) milliseconds (100 Hz sampling frequency). Data from several recorders (for current and received voltages) can be merged and processed together with the FullWaveViewer program delivered with the system. All data is synchronized through the GPS-PPS time stamping. A post acquisition processing allows to improve the signal-to-noise ratio, giving good quality IP data for deep investigations in noisy areas.

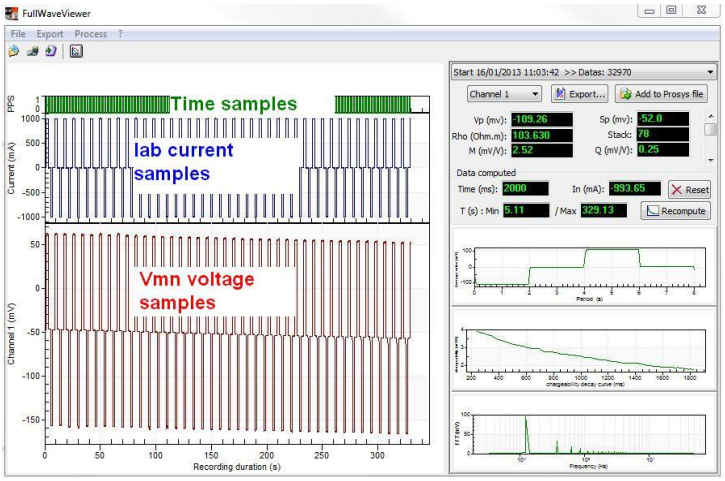
Internal memory: the memory can store up to three months recording time. Then data can directly be transferred to a USB key in a few seconds.



I-FULLWAVER

FULLWAVEVIEWER PROGRAM

The instrument is delivered with a pc program to process data on a pc. Samples can be displayed, filtered and processed. Resitivity, chargeability, self potential are computed and displayed. Windows of samples can be selected to be processed in order to remove noisy data. A frequency analysis is performed and several filtering options are available. Files can be processed together in correlation with the times series recorded at the transmitter. All time pulses, every second, are shown. All data can be printed and exported in text file for a user advanced processing.



USB DATA TRANSFER

All samples can be transferred directly on the field to a USB key. This operation takes a few seconds, each data file has an automatic file name described with date information. A 8 GB USB key is delivered with each unit.

FEATURES

TECHNICAL SPECIFICATIONS

- Current range: +/- 25 000 mA
- Current resolution: 0.1 mA
- Accuracy: +/- 1 mA
- Protection: up to 50 A and 3 000 V
- Magnetic sensor
- Magnetization offset (offset memory): up to 0.05%
- Offset calibration
- Sampling rate: 10 milliseconds (100 Hz)
- Integrated GPS with PPS (one pulse per second)
- Time resolution: 250 micro seconds (time stamped samples)
- Battery test

GENERAL SPECIFICATIONS.

- LCD display, alpha numeric with 4 lines of 20 characters
- Data flash memory: three months recording
- After acquisition: possibility of data storage on a USB key (8 Gb or more).
- Power supply: internal Li-Ion rechargeable battery; optional external 12V standard car battery can be also used
- Autonomy: 20 operating hours with the internal Li-Ion battery.
- Weather proof IP 67
- Shock resistant resin NK-7, case with handle
- Operating temperature: -20 °C to +70 °C
- Dimensions: 31 x 25 x 15 cm
- Weight: 3.0 kg

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