I-FULL WAvER

**IP FULL WAVE RECORDER**

For Advance Processing

**MINERAL EXPLORATION**

- Recording Injected Current
- Up to 8 hours recording
- Time Stamped Data

*I-Full Waver*, compact recorder for full wave signal

**I-Full Waver**: 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-Full Waver 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-Full Waver is connected close to the transmitter or close to any injection electrode.

**Internal GPS**: an internal 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-Full Waver receiver loggers installed in a same area. This information displays the behavior 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 Full Wave Viewer program delivered with the system. All data is synchronized through the GPS-PPS time stamping. A post acquisition processing permits to improve the signal-to-noise ratio and to get good quality IP data for deeper investigations or in case of noisy areas.

**Internal memory** the memory can store up to 8 hours corresponding to 2 860 000 samples. Then data can be transferred to a computer or directly to a SD card on the field by using a pocket SD card reader.
FULL WAVE VIEWER PROGRAM

The instrument is delivered with a pc program to transfer data through USB to a pc. Samples can be displayed, filtered and processed. Resistivity, 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.

FEATURES

TECHNICAL SPECIFICATIONS

- Current range: +/- 25 000 milli amp
- Current resolution: 0.4 milli amp
- Accuracy: +/- 3 milli amp
- Protection: up to 50 amp and 3 000 V
- Offset calibration
- Sampling rate: 10 milli seconds (100 Hz)
- Internal 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: 2 860 000 samples corresponding to 8 hours continuous recording
- After acquisition: possibility of data storage on external SD card with a capacity of 1 800 hours (option)
- USB and serial link RS-232 for data download
- Power supply: internal Li-Ion rechargeable battery; optional external 12V standard car battery can be also used
- Autonomy: 40 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: 2.8 kg

SD CARD READER

All samples can be transferred directly on the field to a SD card without any pc. The SD CARD reader can be carried in a pocket and collect the full memory within a few minutes. For Instance a 4 GB card can store 1 800 hours of data recording.