# **IRIS INSTRUMENTS**

## **V-FULLWAVER**



V-FullWaver, compact recorder for full wave signal

**2 CHANNELS** 

IP FULLWAVE RECORD

**MINERAL EXPLORATION** 

- 2 simultaneous dipoles
- Several weeks recording
- Time stamped data

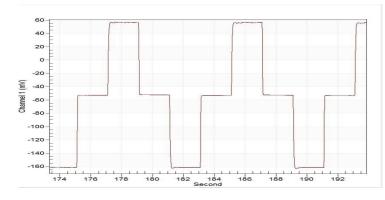
**V-Full Waver:** this logger for electrical signal is a new concept of compact and low consumption unit designed for advanced Time Domain Induced Polarization, Resistivity and SP measurements. It can work in all field conditions, small, discrete, autonomous and can record continuously without operator.

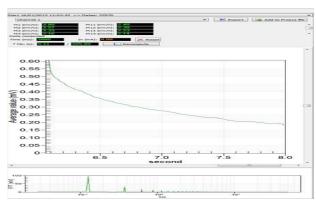
**Compactness:** light, discrete and easy to setup on the field, even on remote areas. Autonomous two dipoles logger, no need of the operator during acquisition. V-FullWaver allows a high productivity for dipole-dipole, gradient, extended poly-pole and other arrays. A network of several tens of channels can be quickly installed on the field for deep exploration and advanced processing (perpendicular dipoles, remote reference...)

**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 process data from several V-FullWaver loggers installed in a same area. This is also useful to correlate with injection dipole waveform, in case this has also been recorded with a I-FullWaver logger.

**High resolution:** samples are recorded every 10 (ten) milliseconds (100 Hz sampling frequency). Data from several recorders 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 permits to improve the signal-to-noise ratio. This also allows good quality IP data for deep investigations and for noisy areas.

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

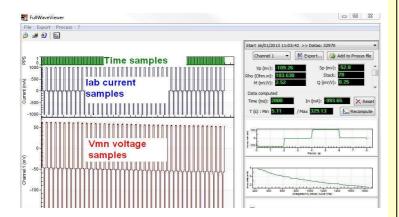




### V-FULLWAVER

#### **FULL WAVE VIEWER PROGRAM**

The instrument is delivered with a pc program to process data on 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.



#### **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**

- Max. input voltage: 15 V
  Protection: up to 1 000 V
- Accuracy: 0.2 % typical
  Resolution: 1 μV
- Sampling rate: 10 milliseconds (100 Hz)
- Induced Polarization (chargeability) measured every 10 milliseconds (200 IP windows for a 2 sec pulse)
- Input impedance: 100 M $\Omega$
- Low pass filter Cut off frequency: 10 Hz
- Upper frequency which can be resolved: 50 Hz
- Frequency resolution: up to 34 µHz
- Internal GPS with PPS (one pulse per second)
- Time resolution: 250 micro seconds (time stamped samples)
- Battery test
- Contact resistance check

#### **GENERAL SPECIFICATIONS.**

- LCD display, graphic and alphanumeric with 16 lines of 40 characters
- Data flash memory: two 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 (with external battery)
  - -20 °C to +60 °C (with internal battery)
- Dimensions : 31 x 25 x 15 cm
- Weight: 3.0 kg



Specifications subject to change without notice BR\_FW\_V\_GB\_V2

IRIS INSTRUMENTS - 1, avenue Buffon - 45100 Orléans - France Phone: +33 (0)2 38 63 81 00 - Fax: +33 (0)2 38 63 81 82 E-mail: sales@iris-instruments.com - Web site: www.iris-instruments.com