

Elrec Pro Data Sheet

The Elrec Pro is a 10 channel Induced Polarisation (IP) and Resistivity receiver designed to improve productivity when recording deep profiles and soundings. Beside the classical arithmetic and logarithmic modes, ELREC Pro also offers a Cole-Cole mode and twenty fully programmable windows for a higher flexibility in the definition of the IP decay curve.



Elrec Pro field set-up.

A setup wizard guides the operator through each parameter to ensure the instrument is configured correctly.

The system includes in built quality control tools to aid the operator validate measurements during data acquisition, and displays IP decay curves in real time.

The Elrec Pro is designed for use with the VIP series of high power transmitters. The Elrec automatically synchronises (and re-synchronizes at each new pulse) with the transmission signal, through the waveform recognition process, ensures high measurement repeatability.

For large 2D and 3D surveys, the Elrec Pro Switch allows to switch the ten channels of the receiver among 48, 72, 96, 120... electrodes. In practice, this allows to read very large combinations of electrode without having to connect/disconnect several time wires and electrodes. Acquisition time can be strongly reduced compared to receivers featuring a high number of channels but no automatic switching capability. When operating the system in this manner complex measurement sequences can be designed and uploaded to the system via Electre II or Electre Pro software.

Product Dimensions

Physical	Dimensions (L x W x H)	Weight
(instrument only)	31cm x 21cm x 21cm	6kg

Technical Specifications

Input Voltage:	Max. for channel 1: 15 V Max. for the sum from channel 2 to channel 10: 15 V Protection: up to 800V.
Voltage Measurement:	Voltage measurement: Accuracy: 0.2 % typical Resolution: 1 μ V
Chargeability measurement:	Accuracy: 0.6 % typical.
Induced Polarisation windows:	20 automatic or user defined windows.
Induced Polarisation Modes:	Arithmetic, Logarithmic and Cole-Cole.
Input Impedance:	100?
Injection Duration:	500ms, 1s,2s,4s,8s.
Stacking:	50 to 60Hz power line rejection. SP compensation through automatic linear drift correction.
Noise Rejection:	50 to 60Hz power line rejection. SP compensation through automatic linear drift correction.
Reported Measurements:	Computation of apparent resistivity, average chargeability and standard deviation
Synchronization:	Automatic synchronization and re-synchronization process on primary voltage signals.
Memory:	Flash, capable of storing over 21,000 readings
Communication:	Serial or USB.
Power:	Internal 12V, 7.2Ah rechargeable battery. Optional external 12V battery can also be used.
Operating Temperature:	-20 °C to +70 °C.