



VIP 3000/ VIP 4000

IP and Resistivity Transmitter

VIP 3000/VIP 4000

IP AND RESISTIVITY ADVANCED TRANSMITTER

Features

- 3000V output voltage
- Full microprocessor control
- Ease-of-use
- Standard motor generator

General

The VIP family of transmitters is now available in either a 3000 or 4000 watt version. Both VIP Systems are power current regulated Time Domain and Frequency Domain electrical transmitters.

VIP 3000/VIP 4000 Major Benefits

Light in weight and provided with a high voltage (3000V) output, the VIP 3000/VIP 4000 are particularly convenient for IP surveys in high resistivity rugged areas and for deep resistivity soundings.

Microprocessor controlled for ease of operation and protection against misuse, all injection parameters (current, voltages, ...) are controlled. The VIP 3000/VIP 4000 can also be operated through its remote control port (RS232).

The VIP 3000/VIP 4000 eight output dipoles provide for higher productivity in the field. Powered from a standard 220V single phase motor generator, the VIP 3000/VIP 4000 eliminate the maintenance and supply problems associated with custom power sources. It also reduces the costs and problems of shipping motor generators over long distances, namely by plane.

High Outputs

The VIP 3000/VIP 4000 will generate up to 3000 volts for work in high resistivity areas and up to 5 amperes at 600 volts (VIP 3000) / 800 volts (VIP 4000) for low resistivity regions.

With its weight of only 16kg, the VIP 3000/VIP 4000 are the lightest 3000W/4000W units on the market.

Heavy Duty Construction

Very high quality connectors, and heavy duty industrial components are used throughout. The VIP3000/VIP 4000 are shock resistant and weatherproof, for a higher reliability.

Fully Automated

The VIP 3000/VIP 4000 are designed for ease of operation. They have a much simplified front panel: current, dipole and frequency (in

the frequency domain) settings are the only parameters to be selected by the operator. All the other functions, like voltage range setting, are fully automated.

Programmable

Programming functions are also available, either through the front panel, with a suitable key, or from an external computer terminal. These functions are used to select the parameters and options that are not normally changed during a survey: operating mode, time or frequency domain, cycle time, frequencies, etc.

This approach reduces front panel cluttering and drastically reduces the possibility of operator mistake. Instrument reliability is also increased. For example, it is not possible to switch dipoles when transmitting. This eliminates the possibility of burning out the selector switch or the output circuitry.

Error Messages

Intelligent messages and warnings are displayed in case of problem or malfunction. Furthermore, the permanent storage of all the parameters related to the operation of the unit make easier the remote identification of a trouble by the manufacturer for quicker instrument servicing.

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Complete Display

A large backlighted LCD alphanumeric display is provided for the simultaneous indication of all output parameters. Output current, output voltage, contact resistance and output power are continuously displayed.

Intelligent Regulation

The VIP 3000/VIP 4000 internal microprocessor is capable of excellent current regulation in almost any load.

Current is operator selectable in preprogrammed steps from 50mA to 5 amperes. Intelligent current adjustment algorithms are always in operation. For example, the contact resistance will occasionally be too high for the VIP 3000/VIP 4000 to provide the requested current setting. In such cases, the VIP 3000/VIP 4000 will display a warning message and will set the current to the maximum value allowable under that combination of current setting and contact resistance. Some reserve current capacity will always be kept to insure that the current stays constant during the measurements, whatever the contact resistance fluctuations.

Remote Control

The VIP 3000/VIP 4000 are provided with a remote control port. By using radio modems, it can be operated from a remote location.

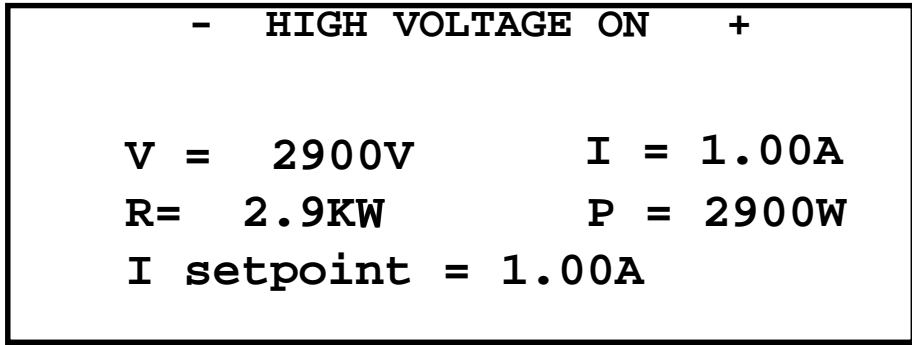
The VIP 3000/VIP 4000 can also be linked to an intelligent receiver such as the ELREC 6 or the ELREC 10, or to a computer, for the automatic recording of current settings. Finally, synchronization with a receiver or system is also possible in both directions (i.e. Rx to Tx or Tx to Rx).

Works With Almost Any Power Generator

The VIP 3000/VIP 4000 IP transmitter can be powered by almost any motor generator providing a nominal 230V, 45-450 Hz output, single phase, at a suitable KVA rating.

Low cost commercial generator sets, available at local hardware or equipment rental stores are perfectly suitable.

For related interpretation software see [RESIX IP](#), [RESIX 2DI](#), and [RESIX IP2DI](#).



VIP 3000/4000 Display

Specifications

Output Power: 3000/4000VA maximum

Output Voltage: 3000 V maximum, automatic voltage range selection

Output Current: 5 amperes maximum, current regulated

Current accuracy: better than 1%

Current stability: 0.1%

Dipoles: 8, selected by push button

Output Connectors: connectors accept bare wire or plug of up to 4mm. diameter.

Tune Domain Waveforms: On+, off, on-, off, (on = off) preprogrammed cycle. Automatic circuit opening in off time. Preprogrammed on times from 0.5 to 8 seconds by factor of two. Other cycles programmable by user.

Frequency Domain Waveforms: Square wave, Preprogrammed frequencies from 0.0625 Hz to 4 Hz by factors of 2. Alternate or simultaneous transmission of any two frequencies. Other frequencies programmable by user.

Time and Frequency Stability: 0.01%, 1 PPB optional

Display: Alphanumeric liquid crystal display. Simultaneous display of output current, output voltage, contact resistance, and output power.

Protection: Short circuit at 20 ohms, Open loop at 60000 ohms, Thermal, Input overvoltage and undervoltage.

Remote Control: Full duplex RS-232A, 300-19200 bauds. Direct wire sync for on-time and polarity.

Miscellaneous

Dimensions (h w d): 41 x 32 x 24 cm.

Weight: 16 kg

Power Source: 175 to 270 VAC, 45-450 Hz, single phase Motor Generator

Operating Temperature: -40 to +50 degrees Celsius.

Standard Components

VIP 3000 or VIP 4000 Console, Programming Key, RS-232 Interface Cable, Motor Generator Cable, Operations Manual and Shipping Case.

Ordering Information

Description	Order Number
VIP 3000 Transmitter.....	500-190-0027
VIP 4000 Transmitter.....	500-190-0028