IRIS INSTRUMENTS



VIP 10000

RESISTIVITY & IP

10 kW

TRANSMITTER

- Outputs: 3000 V 10 000 W 20 A
- Full microprocessor control
- Ease-of-use
- Standard motor generator

The VIP 10 000 is a ten kilowatt current regulated Time Domain Induced Polarization transmitter.

VIP 10 000 ADVANTAGES

- Light in weight and provided with a high voltage (3000V) output, the VIP 10 000 is 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.
- Powered from a standard single phase or three phases motor generator, the VIP 10 000 eliminates the maintenance and supply problems associated with custom power sources.

VIP 10 000 MAIN FEATURES

HIGH OUTPUTS:

• The VIP 10 000 will generate up to 3000 volts for surveys in high resistivity areas and up to 20 amperes at 500 volts for low resistivity regions. With its weight of only 35 kg, the VIP 10 000 is the lightest 10 000W unit available on the market.

FULLY AUTOMATED:

• The VIP 10 000 is designed for ease of operation. It has a much simplified front panel: current is the only parameter 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 special key combination, 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 domain, cycle time, ...
- This approach reduces front panel cluttering and drastically reduces the possibility of operator mistake. Instrument reliability is also increased.



VIP 10 000

COMPLETE DISPLAY:

A back-lighted liquid crystal alphanumeric display is provided for the simultaneous indication of all output parameters. Output current, output voltage, contact resistance and output power are continuously displayed.

ERROR MESSAGES:

Messages and warnings are displayed in case of problem or malfunction.

Some reserve current capacity will always be kept to insure that the current stays constant during the measurements, whatever the contact resistance fluctuations.

HEAVY DUTY DESIGN:

Very high quality connectors and heavy duty industrial components are used throughout. The VIP 10 000 is shock resistant and weatherproof, for a higher reliability.



INTELLIGENT REGULATION:

The VIP 10 000 internal microprocessor is capable of excellent current regulation in almost any load. Current is operator selectable in preprogrammed steps from 50 mA to 20 A. A lower current, down to 5 mA, can be selected in case of high grounding resistance. The VIP 10 000 calculates automatically the maximum current allowed. For example, as the contact resistance may occasionally be too high for the VIP 10 000 to provide the requested current setting, it will then display a warning message and will set the current to the maximum value allowable under that combination of current setting and contact resistance.

WORKS WITH ALMOST ANY POWER GENERATOR:

The VIP 10 000 IP transmitter can be powered by almost any motor generator providing a nominal 220 V, 45-800 Hz output, single phase or three phases (for maximum output power), at a suitable kVA rating (15 kVA recommended), with the AVR (automated voltage regulation). It will also work at about half power with a 110 V power generator. Low cost commercial generator sets, available at local hardware or equipment rental stores are perfectly suitable.

POWER GENERATOR:

TECHNICAL SPECIFICATIONS

- Output power: 10 000 W maximum
- Output voltage: 3000 V maximum
- Automatic voltage range selection
- Output current: 20 A maximum, current regulated
- Current accuracy: better than 1%
- Current stability: 0.1%
- Output connectors: connectors accept bare wire or plug of up to 4 mm. diameter

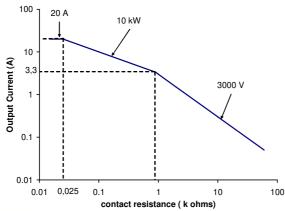
TIME DOMAIN MODE:

- Waveform: ON+, OFF, ON-, OFF, (ON = OFF) preprogrammed cycle
- Automatic circuit opening in off time
- Preprogrammed ON times of 0.5, 1, 2, 4 or 8 seconds
- 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

GENERAL FEATURES:

- Dimensions (h w d): 55 x 51 x 37 cm
- Weight: 35 kg
- Power source: 180 to 240 VAC, 45-800 Hz single phase (works a about half power with a 110 V source) with the AVR (automated voltage regulation)
- Operating temperature: -40 to +50 $^{\circ}$ C





Specifications subject to change without notice BR_VIP_10_GB_V1



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