

## VIP Transmitter Data Sheet

The VIP series of Electrical transmitters are purposely designed for deep Induced Polarisation or Resistivity sounding investigations. Predominantly used as part of mineral exploration studies the VIP series includes four systems with different power specifications.



*VIP 3000 Resistivity and IP transmitter.*

To simplify operation the instrument manages the injection current and voltage automatically. Prior to injection the VIP will check to make sure suitable power is available. In addition this feature stops the instrument from being misused. VIP systems can be controlled via a remote PC or laptop to help configure and trigger the system at great distances. All VIP systems offer four operating modes;

- Time domain waveform, on Time (Ton) and Off time (Toff),
- Frequency domain waveform, outputting two user selectable frequencies from 0.0625Hz and 4Hz.
- Dual frequency mode, a base frequency is selected from 0.0625 and 0.5Hz and the high frequency is fixed at 8 times the base frequency.
- Continuous mode, injects a constant DC current into the ground.

Four VIP systems are available; VIP3000, VIP4000, VIP5000 & VIP10000- which makes the range suitable for use in almost all geological formations.

In situations where a wired synchronisation is not possible the VIP can be operated alongside the IFullwaver for accurate absolute time stamps when recording precise full waveform time domain measurements. See datasheets for individual specifications.

## Product Dimensions

| Physical          | Dimensions (L x W x H) | Weight |
|-------------------|------------------------|--------|
| (instrument only) | 32cm x 24cm x 41cm     | 16kg   |

## Technical Specifications

|                                      |   |
|--------------------------------------|---|
| <b>Output Power:</b>                 | VIP3000 - 3000W<br>VIP4000 – 4000W<br>VIP5000 - 5000W<br>VIP10000- 10000W   |
| <b>Output Voltage:</b>               | 3000V for all systems   |
| <b>Output Current:</b>               | VIP3000 - 5A<br>VIP4000 – 5A<br>VIP5000 – 10A<br>VIP10000- 20A maximum current regulated.   |
| <b>Current accuracy:</b>             | Better than 1%  |
| <b>Dipoles:</b>                      | Up to 8 transition dipoles can be selected.   |
| <b>Modes of Operation:</b>           | Time Domain or Frequency domain   |
| <b>Time domain cycle times:</b>      | From 0.5 to 8s  |
| <b>Frequency options:</b>            | 0.0625Hz to 4Hz by factors of 2   |
| <b>Time and Frequency stability:</b> | 0.01%   |
| <b>Quality control:</b>              | Displays output current, output voltage, contact resistance and input power.  |
| <b>Protection:</b>                   | Short circuits at 10ohms, Thermal, Input overvoltage and under-voltage.   |
| <b>Synchronisation:</b>              | Direct wire sync of on-time and polarity.   |
| <b>Operating temperature:</b>        | -40 to +50  |
| <b>Power requirements:</b>           | VIP3000 - recommended 4.5kVA single-phase generator. 175 to 270VAC, 48-450Hz. (works at about half power with 110V source)<br><br>VIP4000 - 175 to 270VAC, 48-450Hz single-phase generator (works at about half power with 110V source)<br><br>VIP5000 - 175 to 270VAC, 48-800Hz single or three-phase. |

VIP10000- 175 to 270VAC, 48-800Hz three-phase for maximum power  
(operates at reduced power with single phase generator)