TSi Power Pvt. Ltd. is involved in manufacturing of **IGBT based PWM Static Voltage Regulator with Precision (VRP).** It is suitable for applications where stable power is mandatory for *high-end*power and control electronics used in:

- 1. CNC & Robotics
- 2. Auto & Auto-ancillary
- 3. Textile Spinning, Processing, Knitting & Weaving
- 4. Engineering & Process Industry
- 5. Wood Cutting
- 6. Oil & Gas
- 7. Radar & Telecommunication
- 8. R & D, Testing, Diagnostics
- 9. Plastic Processing
- 10. Printing & Packaging
- 11. Security and Surveillance
- 12. Building Management and other hi-tech applications.

It provides **precision power** with *real-time* control of:

- a) Sag
- b) Swell
- c) Noise
- d) Spike& other damaging voltage disturbances within *20 milliseconds* for improved productivity of your electronic machines &increased profits.
- Standard single-phase Static Voltage Regulators with Precision (VRP) units are available in +/- 20% and +/- 26% fluctuation range with capacities ranging from 1KVA to 100KVA.
- Standard three-phase Static Voltage Regulators with Precision (VRP) units are available in +/- 13%, +/- 20%, +/- 26% and +/-12% fluctuation range with capacities ranging from 3KVA to 315KVA.

These Static Voltage Regulators with Precision (VRP) are *plug & play* type, *easy to install* and are *light in weight*. They are available for both *indoor installation* as well as *outdoor installation*.

<mark>Key Features:</mark>

The TSi-VRPsystem providesreal-timecontrol of Sag, Swell, Noise, Spike and Transients within 20 milliseconds.

- > In-built Spike and Noise Control Filters.
- Since the VRP does not switch components in the power path, it is compatible with most loads including regenerative loads.
- AC input circuit breakers prevent costly equipment damage due to load side faults.
- > Automatic Bypass for Regulator Engine assures fail safe operation.
- > Light weight&Compact size makes for ease of installation.
- Static technology results in quiet operation, high product up-time & low maintenance.
- High efficiency and energy savings through optimum voltage result in energy efficient operation.
- Tight control over electronic card failures, data corruption and machine breakdownsresult in higher productivity, lower operating costs, and greater consumer comfort.

Few Technical Specification:

- > Available in both *Single phase and Three phase*
- Single Phase VRP Capacity (KVA): 1 KVA to 100 KVA
- > Three Phase VRP Capacity (KVA): 3 KVA to 315 KVA
- **Regulator Engine:** *High frequency 20 Khz IGBT driven voltage regulation convertor.*
- > Nominal Input Voltage: 415 Volts ac (Can be pre-set at any value between 380-415V)
- Input Voltage Fluctuation Ranges: +/- 13%, +/- 20%, +/- 26% and +/-12%
- > Typical Output Voltage regulation: +/- 1%
- Power efficiency: over 97 %
- Dimensions (mm): 610(D) x 610(W) x 640(H) for 3KVA to 888(D) x 888(W) x 838(H) for 160 KVA unit&800(D) x 1200(W) x 2000(H) for 315KVA
- > LED display for Regulation mode, Bypass mode & Fault conditions.