

TSI VRP an offering from COMPACT-STATIC POWER CONDITIONER:

The biggest enemies of modern electronic machines are voltage disturbance like sags,swells,spikes,transients and HF noises. These damaging voltage disturbances severely harm your electronic production machines, causing breakdown, data corruption, reduced productivity, tool damages and huge overheads resulting in loss of profits.

20 milliseconds – That will impact your business!



20 milliseconds is the maximum time you get to control this vagaries/volatility and convert bad power quality into precision power, confirming to ITIC Curve for electronics.

Only TSI VRP an offering from COMPACT static power conditioner, based on PWM regulation and sage control technology, delivers this performance in 20 milliseconds.

SPC assures seamless operation of electronic machines by providing purest power through continuous pulse width modulation (PWM) switching of a buck-boost transformer using a converter engine.

The high frequency insulated gate bi-polar transistor (IGBT) driven converter engine takes the incoming AC power, measures against the nominal voltage and adds or subtracts voltage 20,000 times per second, to achieve real-time compensation of voltage disturbances, sags or swell. All this is achieved within 20 milliseconds through seamless PWM compensation of voltage so that all voltage isturbances are corrected within ITIC CURVE for flawless operation of electronics.

*TSI VRP an offering from COMPACT – Static Power Conditioner – a revolutionary technology that provides **Fast Voltage compensation compared to SERVO and other kind** that have been used hitherto.*

A brief comparison with Servo as below would throw more light on SPC being superior to other voltage regulator technologies that are offered in the market place.

A glimpse at differences between SERVO STABILISER & STATIC POWER CONDITIONER

S.NO	FEATURE	<u>STATIC POWER CONDITIONER</u>	SERVO STABILISER / AVR	BENEFITS OF SPC + DISADVANTAGES of SERVO to the End User.
1	Voltage Response & Correction Time	20 milliseconds	2000-3000 milliseconds	Cannot control sag cycles. Creates a high voltage surges immediately after voltage sag.
2	Output	+/- 1% constant output voltage	Can deliver constant voltage only under steady state conditions. The output becomes unstable under sudden voltage fluctuations	Complete protection to the connected load- Less breakdowns – No productivity loss
3	Regenerative loads	Comfortably handle regenerative loads	Becomes unsteady with regenerative loads	Suitable for all kinds of loads especially in an environment where there are multiple machineries connected resulting in regenerative loads
4	Topology and engineering	Solid state device with no moving parts	Made with moving parts like carbon brush etc. requires frequent maintenance. Problem arises if brush gets jammed	Very high reliability with SPC. No productivity loss. No opportunity loss.
5	Surge / spike protection	inbuilt	Not inbuilt- has to be installed externally separately. SERVO vendors recommend ISOLATION TRANSFORMER to curb spikes /surges. Further SERVO creates micro sparks and electrical noise	One device that takes care of nearly all the power related issues. No need for spike/surge protection device separately.