



**MICRO-CONTROLLER BASED SERVO STABILIZER CONTROL MODULE**





## **SALIENT FEATURES**

➤ <b>MICRO-CONTROLLER CONTROL MODULE</b>	This is equipped with <b>Advanced RISC Micro-Controller</b> controlled fully automatic servo control voltage stabilizer.
➤ <b>DISPLAY MODULE</b>	This has Digital / LCD display for True RMS Voltage, Current, status indications and parameters. Equipped with soft touch buttons for ease of operations make it a desired product.
➤ <b>PROTECTION</b>	<ul style="list-style-type: none"> <li>✓ Short circuit</li> <li>✓ Single Phase Preventor</li> <li>✓ Over-current electronic protection</li> <li>✓ In case output feedback is disconnected or loose connected; it detects the failure and display shows FAIL and Output goes to minimum.</li> <li>✓ Overload protection is provided in case load current exceeds the set limit to safeguard the entire stabilizer. Once the overload situation occurs it switches off the system and displays "HI" current and it resets when load is reduced and "SET" button is pressed.</li> </ul>
➤ <b>OUTPUT TIME DELAY</b>	Output Time Delay is user programmable from 1 second to 180 seconds and also option of bypassing the same through soft touch button.
➤ <b>HYSTERESIS</b>	Hysteresis is introduced (to a value, again user programmable from 1 V to 13 V) to minimize hunting of motor, where there is a lot of fluctuation in the incoming power supply.
➤ <b>LOW VOLTAGE CUT OFF</b>	Low voltage cut off is user programmable and can be varied up to 210V AC.
➤ <b>HIGH VOLTAGE CUT OFF</b>	High voltage cut off is user programmable and can be varied from 220V to 254V
➤ <b>CUSTOMIZATION</b>	Customized Voltage Range available to suit any customer requirements.
➤ <b>EFFICIENCY</b>	High efficiency of 97 % to 99% is achievable
➤ <b>STANDARDS/APPROVALS</b>	Defence JSS Standards and ISI Standards are conformed
➤ <b>EASE OF MAINTENANCE &amp; REDUCTION OF DOWN TIME</b>	Because of detachable Control modules, our servo stabilizers offer ease of maintenance as there is no need to move the whole equipment; only control module can be moved and replaced if required.
➤ <b>ALL WEATHER OPERATIONS</b>	Detachable Control modules offer flexibility of keeping the servo motorized Variac & Power Transformer tank in the open weather and Detachable Control modules inside the premises. This saves the cost of assembling full weather canopy for Servo Stabilizers.

## **ADVANTAGES OF USING MICRO-CONTROLLER BASED SERVO STABILIZER CONTROL MODULES**

- ✓ **CONTROLLED & CONSTANT VOLTAGE.**
- ✓ **REDUCED FAILURE RATE OF ELECTRICAL COMPONENTS.**
- ✓ **REDUCTION IN THE DOWNTIME / IMPROVEMENT IN THE POWER FACTOR .**
- ✓ **IMMEDIATE RESPONSE TO INPUT TRANSIENT SURGES.**
- ✓ **ENERGY SAVER-REDUCTION IN POWER WASTAGE (LOWER ELECTRICITY BILLS).**
- ✓ **CAN BE MODIFIED FOR OUTDOOR SERVO STABILIZER APPLICATIONS.**
- ✓ **PLUG-IN-TYPE MODULE HELPS MINIMIZING DOWN TIME / MAINTENANCE EXPENSES.**



### Specifications:-

<b>INPUT VOLTAGE CORRECTION RANGE</b>	90 V / 140 V / 160 V-275 V AC for 1 phase 240 V / 260 V / 300 V-480 V AC for 3 phase
<b>OUTPUT VOLTAGE</b>	User Programmable; 220 V / 230 V AC RMS $\pm$ 1% (1 phase), 400 V / 415 V AC RMS $\pm$ 1% (3 phases)
<b>OPERATING FREQUENCY</b>	50 Hz $\pm$ 5 %
<b>SPEED OF CORRECTION</b>	~ 35 Volt / Second
<b>RECOVERY TIME</b>	~ 500 msec. (at change between 165 V AC - 255 V AC)
<b>TOTAL OUTPUT EFFICIENCY</b>	> 98% (under full load)
<b>CONTROL TECHNOLOGY</b>	RISC Micro-Controller based Embedded Design
<b>DISPLAY</b>	True RMS Digital/LCD Voltmeter, Ammeter, system scanning with Micro-Processor
<b>HYSTERESIS ADJUSTMENT</b>	User Programmable; Can be varied from 1V to 13V
<b>OUTPUT DELAYED TIME ADJUSTMENT</b>	User Programmable; Can be varied from 15 sec to 180 Sec
<b>OUTPUT UPPER LIMIT CUT-OFF</b>	User Programmable; Can be varied from 220V to 254V
<b>OUTPUT LOWER LIMIT CUT-OFF</b>	User Programmable; Can be varied up to 210V
<b>OUTPUT PROTECTION</b>	<ul style="list-style-type: none"> <li>✓ Over-current electronic protection</li> <li>✓ In case output feedback is disconnected or loose connected; it detects the failure and display shows FAIL and Output goes to minimum.</li> <li>✓ Overload protection is provided in case load current exceeds the set limit to safeguard the entire stabilizer. Once the overload situation occurs it switches off the system and displays "HI" current and it resets when load is reduced and "SET" button is pressed.</li> </ul>
<b>OPERATING TEMPERATURE</b>	-10° C to + 55° C
<b>RELATIVE MOISTURE/HUMIDITY</b>	Maximum 95%
<b>OPERATING HEIGHT</b>	Maximum 3000 meters
<b>ACOUSTIC LEVEL</b>	Less than 45 dB
<b>FRONT PANEL CONTROLS</b>	Display module with Voltage and Status indicators and soft touch buttons for ease of operations; Parameter "Set" Switch, High-Low Voltage Indicator, Automatic - Manual Selector Switch, Voltage Buck & Boost Switch
<b>DEFENCE &amp; JSS STANDARDS PASSED</b>	JSS: 6110-01-1998; JSS: 55555
<b>IS STANDARDS PASSED</b>	IS 9815 with latest amendments
<b>EMI / RFI SUPPRESSOR</b>	ECC Part 15 Class B, EMI - RFI filter

### ABOUT AUTORONICA

AUTORONICA is a small sized company, started by a NRI technocrat in Panchkula (Haryana State) in 1992. This small-scale company with its highly dedicated & skilled team has established its name in the field of power conditioning equipments. Autoronica has come a long way since its inception. Started as a small company manufacturing Earth Leakage Circuit Breakers for industrial and domestic use, the company used its knowledge & experience to develop new power conditioning and power generation equipments like Online & Line Interactive UPS, Industrial & Domestic Inverters, Servo Voltage Stabilizers, Automatic Voltage Correctors, Line Conditioners, Float cum Boost Chargers, DC-DC Converters, AC-DC Converters, Solar Photovoltaic Inverters / Chargers, Battery Chargers and Battery Testers.

**Head Office: 403, Industrial Area, Phase-2,  
Panchkula-134113 (Haryana State) India-134113  
Telefax: +91-172-2593350, 2591669  
E-mail: [contact@autoronica.net](mailto:contact@autoronica.net)  
Visit us: [www.autoronica.net](http://www.autoronica.net)**

**Dealers**