



DESIGNED FOR  
CRITICAL POWER CONDITIONS



**zener**<sup>®</sup>

[www.zenersystems.com](http://www.zenersystems.com)



## Why ZENER?

**zener**<sup>®</sup>

With over **25 years of experience**, we at ZENER have built a **reputation of offering unparalleled technological expertise**.

Today, we have evolved as one of the leading providers of power conditioning and power protection solutions.

At ZENER, we value you and your specific business needs. This is the reason we aim to provide not just products but **comprehensive solutions** that best suit your specific requirement. Abiding by our brand mission that encompasses values, reliability and technology; we provide **bespoke, state-of-the-art, cost-effective and reliable** solutions for your unique business needs.

With a large **installed base across the country**, a strong **in-house R&D team** and **stringent process control** we ensure highly reliable and quality products that are sure to exceed your expectation. A penchant for **exceptional quality and customer satisfaction** is embedded in our infrastructure and is the reason for our success.



**BMS compatible Interface.**

**Remote monitoring within the factory premises (100 mts) wireless transmission without any GSM connectivity.**

**Remote monitoring of UPS from the comfort of your home/remote location using GSM.**

# Why **uZen**



Increasingly sophisticated IT equipment and automated industrial systems demand continuous and automated operations. **Continuous power** therefore is not only vital but extremely critical. Any power irregularity or disruption, however minor, has serious consequences. Uninterruptible Power Supply or UPS Systems are the ultimate solution to power problems providing both **uninterrupted power backup** and **power conditioning**.

The **uZEN** range of UPS acts as an interface between the mains and sensitive applications to supply the load with continuous, high quality electrical power, free from all disturbances regardless of the condition of the mains.

**uZEN UPS** Systems are typically used in **data centers, IT & ITES industry** and **automated industrial systems** where an unexpected power disruption could cause serious business disruption, data loss and injuries. They have been specially designed to protect sophisticated **IT equipment, medical equipment, computers, telecommunication equipment and other electrical equipment**.

## TECHNICAL SPECIFICATION

### Rating: 1ph-1ph

- ▶ Capacity: 1 - 10KVA
- ▶ DC Bus: 48V / 72V / 96V / 120V / 192V

#### Input

- ▶ Mains Voltage: 230VAC, 1Ph
- ▶ Mains Range: 170V - 270V
- ▶ Mains Frequency: 50Hz  $\pm$  10%

### Rating: 3ph-1ph

- ▶ Capacity: 7.5 - 40KVA
- ▶ DC Bus: 192V / 240V / 360V

#### Input

- ▶ Mains Voltage: 415VAC, 3Ph & N
- ▶ Mains Range: 330V - 470V
- ▶ Mains Frequency: 50Hz  $\pm$  10%

### Rating: 3ph-3ph

- ▶ Capacity: 7.5 - 120KVA
- ▶ DC Bus: 192V / 240V / 360V

#### Input

- ▶ Mains Voltage: 415VAC, 3Ph & N
- ▶ Mains Range: 330V - 470V
- ▶ Mains Frequency: 50Hz  $\pm$  10%

#### Output/Inverter

- ▶ Technology: High Frequency PWM
- ▶ Nominal Output Voltage: 230VAC - 1Ph & 400VAC - 3Ph.
- ▶ Regulation:  $\pm$ 1%
- ▶ Waveform: Sinusoidal
- ▶ Frequency: 50Hz  $\pm$  0.25Hz
- ▶ Crest Factor: 3:1
- ▶ Over Load Capacity: 125% - 1 min & 150% - 10 Secs
- ▶ Power Factor: 0.8 lag to unity
- ▶ Power Device: IGBT
- ▶ Transient Response: Output remains within  $\pm$  5% & recover to normal within 20ms
- ▶ Static Switch: Optional
- ▶ Super Bypass Switch: Available

#### Battery

- ▶ Charger Type: CC/CV
- ▶ Charger Current limit: Adjustable, normally set at 10% of Ah capacity

#### Protections

- ▶ Input: MCBs at Input & Output, MOVs, Snubber Networks, Fastblow Semi conductor Fuse and Soft start, Single Phase Protection
- ▶ Inverter Over Voltage / Under Voltage: 255VAC / 185V for 1Ph & 440VAC / 380V for 3Ph Output

- ▶ General Protections: Semiconductor Fuse, MCB, EMI Filters, Over Temperature, Mains High Voltage & Short Circuit
- ▶ Low Battery Trip: Yes
- ▶ Enclosure Protection: IP - 20

#### General

- ▶ Efficiency; >90% for 1Ph Output & >92% for 3Ph Output.
- ▶ Isolation: Online UPS with Galvanic Isolation for comprehensive power protection
- ▶ LED Indications: Mains ON, Charger ON, Inverter ON, Battery Low, Over Load, Charger Trip, Inverter Trip, Over Temp, On Bypass
- ▶ LCD Display: Mains Voltage, Output Voltage, Load Current, Battery Voltage, Output Frequency, Temperature
- ▶ Audible Alarms: Input Low / Fail, Over Load, Battery Low, Over Temp, Inverter Trip
- ▶ Cooling: Forced Air

#### Environment

- ▶ Ambient Temperature: 0 - 45°C
- ▶ Noise Level: <60 db @ 1.5 meter
- ▶ Relative Humidity: 0 - 90% Non condensing
- ▶ Mobility: Castor Wheels

### Additional Features for

**uZen HSC 303**

- ▶ Capacity: 10 - 200KVA
- ▶ Voltage stability under highly dynamic load condition
- ▶ Frequency stability at 50Hz
- ▶ Crest Factor 4:1
- ▶ Programmable power consumption limit

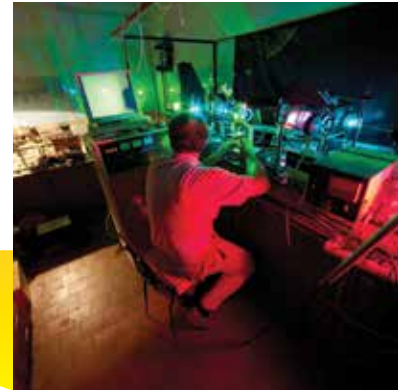


**Information Technology / ITES:** Pure uninterrupted power is one of the most important components of any successful company in IT or the IT enabled services sector. So for over a decade, industry leaders have relied on power solutions from Zener to bring their downtime to zero.

**Cypress Semiconductors, Sasken, Cisco, Mphasis, Symphony, Technicolor, Baxter, Oracle, Valtech, Microland, Lenovo...**

**Research Institutes:** It is impossible for institutions in research to function efficiently with unreliable power. Most of the sensitive testing equipment need continuous power to compute and Zener is the perfect partner to fulfil this role of the most reliable source for pure uninterrupted power.

**JNC, IISc, CNCR, Raman Research Institute, NCBS...**



**Engineering:** When you are in a mission-critical industry like process engineering, it becomes imperative to have clean power that you can depend on. For over a decade now, industries in the engineering & allied services have deployed power solutions from Zener to derive pure power unceasingly.

**Zenith Precision, Kaizan, Saint Gobain, Apotex, Makino Asia, Scania...**

**Healthcare:** Uninterrupted power becomes even more critical in the healthcare sector for it may be a question of life or death. Solutions from Zener harness the power of advanced technology to deliver power you can trust with your life.

**HCG, Narayana Hrudalaya, Nimhans, Mallya, RK, Kidwai, Apollo...**



**uZen HSC 303**

**Designed for  
MRI & CT Scanners**

Also available:

**socomec**  
Innovative Power Solutions

Socomec UPS up to 5400KVA and Solar solutions  
▼zen Voltage Stabilizers and Isolation Transformers

**zener**  
An ISO 9001:2015 Company

Sold & Serviced by:  
**Zener Systems Pvt. Ltd.** 49, Cubbon Road Cross, Cubbon Road, Bengaluru 560 001, India  
Tel: +91 6818 7600 Fax: +91 6818 7601. email: [info@zenersystems.com](mailto:info@zenersystems.com)

