

Stratus ztC Edge™ 250i

Zero-Touch Edge Computing for up to 10,000 I/Os in Pharma Manufacturing, Food & Beverage, Specialty Chemicals, Oil & Gas, and other industrial verticals



Digital transformation of legacy assets presents new challenges when upgrading computing infrastructure at the edge of corporate networks.

Why? Harsh environmental conditions and the lack of skilled resources onsite make deploying, managing, and maintaining computers at remote plants or branch offices especially challenging.

As Internet connected devices generate and process more and more data at these edge locations, companies need advanced computing infrastructure that is simple to deploy and manage, protected against data loss, physical environments, and cyber threats, and autonomous to operate.

Stratus ztC Edge is the answer

The second generation ztC Edge is a secure, rugged, highly automated computing platform that helps understaffed organizations improve productivity, increase operational efficiency, and reduce downtime risk at the edge of their corporate networks.

Designed for both OT (operational technology) and IT (information technology), ztC Edge is easy to deploy and secure, easy to manage locally and remotely, and easy to maintain and service. Self-monitoring, self-protecting, and self-synchronizing, ztC Edge saves companies time and money. With its built-in virtualization, automated protection, industrial interoperability, OT manageability, and field serviceability, ztC Edge enables the quick, easy delivery of both highly available and fault tolerant virtualized edge applications.

Key benefits

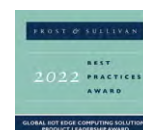
Greater efficiency: With built-in virtualization supporting Windows and Linux guest operating systems, industrial interoperability, and field serviceability, ztC Edge simplifies and shortens the time it takes to deploy, manage, and maintain your critical edge applications, saving you time and effort.

Simplified security: With restricted USB ports, secure communication protocols, secure and trusted boot, role-based access controls, and easy-to-configure host-based firewall, you do not need to be a security expert to secure your ztC Edge platform.

Less downtime: ztC Edge's self-monitoring and self-protecting features help reduce unplanned downtime. And because its operating environment can be updated while it is still running (without requiring a system reboot), customers also experience less planned downtime.

More flexibility: ztC Edge's rugged, compact, industrial form factor performs equally well in the control room, control panel, shop floor, or inside machines, giving customers more choice. Automated capabilities make it suitable for unmanned stations, or remote, decentralized locations with limited IT resources.

Simplified management: RESTful API available in the ztC Edge offers interoperability with your preferred system management tools.



Stratus ztC Edge Features

Stratus ztC Edge is a secure, rugged, highly automated computing platform that enables the rapid and efficient delivery of reliable business-critical applications in remote, understaffed locations at the edge of corporate networks. Features like its built-in virtualization, simplified security, industrial interoperability, OT manageability, rugged form factor, automated protection, field serviceability, and complementary services help companies increase productivity, while minimizing risk of downtime.



Built-in virtualization

ztC Edge ships with its own operating environment called Stratus Redundant Linux. It contains a virtualization host that supports both Windows and Linux guest operating systems, and OVF files and OVA images, including third-party templates. An intuitive management console makes it easy for local and remote staff to set up, configure, import, and manage their virtual machines.



Simplified security

ztC Edge is designed to help OT or IT more easily secure their Edge Computing environment. A host-based firewall, restricted USB ports, role-based access controls with Active Directory integration, secure communications protocols, and secure and trusted boot all work together to minimize your security exposure.



OT and IT manageability

ztC Edge ships with its own management tool, the ztC Edge Console, that simplifies system and software management. With it, administrators can remotely access their systems, set thresholds and alerts, check for updates, backup and restore system settings and preferences, and easily manage their VMs. In addition, administrators can leverage ztC Edge's RESTful API calls to enable interoperability with third-party systems management tools, allowing local or remote monitoring and management on a single pane of glass.



Rugged redundant nodes

Designed for the harsh conditions typically found in industrial locations, ztC Edge nodes are UL Class I Div 2 certified and IP40 rated for deployment anywhere from the control room or control panel to machines on the shop floor, closer to your devices that are generating data. More durable than standard servers or workstations, ztC Edge offers customers greater reliability and deployment flexibility.



Automated protection

When deployed as a redundant pair (dual deployment), ztC Edge provides instant protection for your workloads. Data is automatically replicated across platforms. VMs running on one platform will automatically restart (in High Availability mode) or resume (in Fault Tolerant mode) on the other machine in the event of a failure. If ztC Edge detects a networking or disk failure on one computer, it automatically re-routes traffic or uses data on the other computer, with no operator intervention. Platforms can even be deployed across physical distances for automated local site recovery.



Industrial interoperability

ztC Edge supports common OT and IT protocols, making integration into existing industrial automation environments easier. SNMP requests and traps can be used to configure notifications and alarms. Customers can use OPC UA attributes, or a RESTful API, to present relevant system data within most third-party systems management tools and dashboards.



Field serviceability

When deployed as a redundant pair, ztC Edge platforms are hot-swappable and auto-synchronizing, making field repairs quick and easy. Maintenance or repairs to individual computers can be completed while the node is running and without a system reboot, ensuring service continuity. This allows OT or IT staff to plan and complete a system repair when it is convenient.

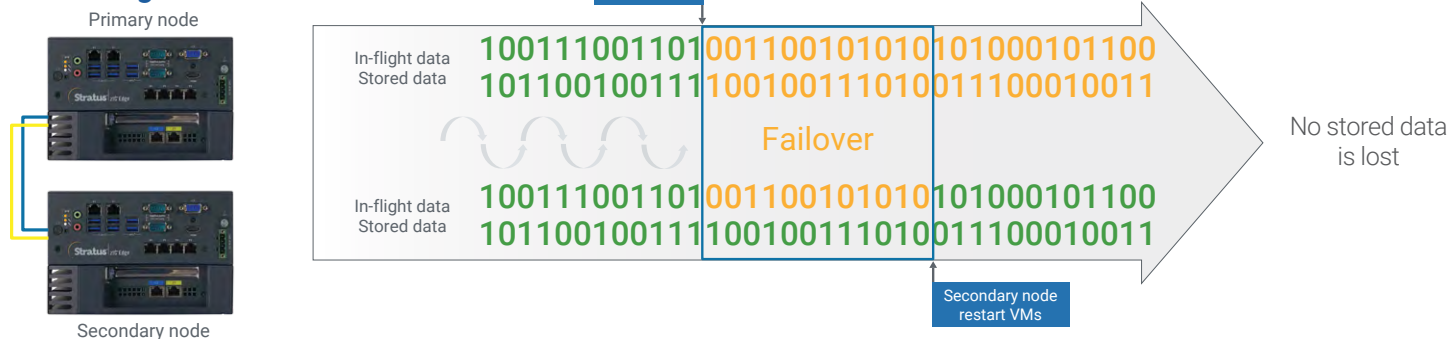


ztC Edge 250i

Enable High Availability or Fault Tolerance with Dual Node Deployment

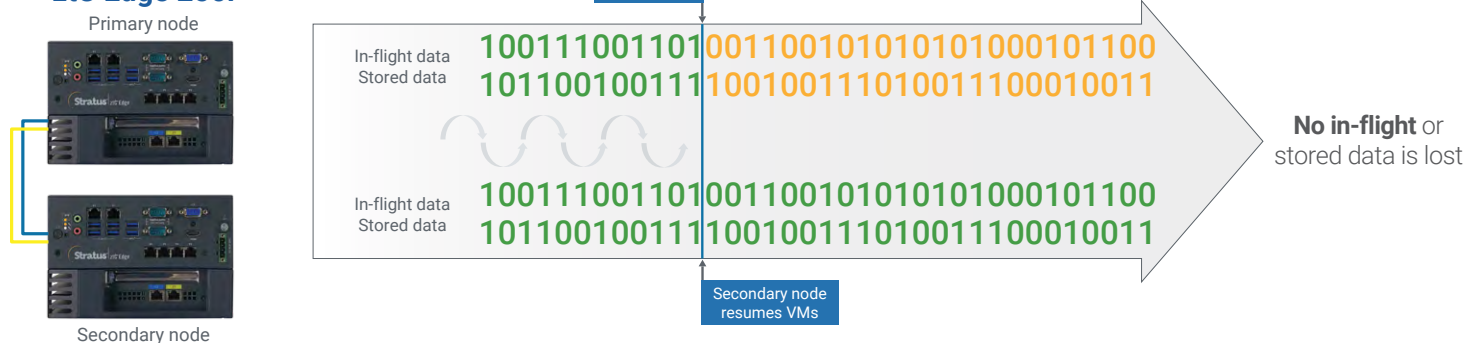
High Availability Configuration

ztC Edge 250i



Fault Tolerant Configuration

ztC Edge 250i



Stratus Services for ztC Edge

Complementary services available with Status ztC Edge include System Support, System Health Add-ons, and Managed Support Services. These services enable system health monitoring, ensuring critical workloads continue to run with minimal customer effort. Stratus provides a single source of support for complex interrelated hardware, software, and operating system issues. Stratus' industry-leading zero-touch Edge Computing platforms backed by Stratus Support deliver the most reliable – and supported – edge infrastructure solution, allowing you to focus 100% of your time on operations. [More+](#)

System Support

9x5 web-based support for 30 min response SLA for critical severity cases

Root cause problem determination

Software updates and upgrades

Secure access to self-service portal

System Health Add-Ons

24x7x365 web and phone support for critical severity cases with 30 min response SLA

Advanced parts exchange

Proactive uptime monitoring

Alert triage optional

System log file review

Predictive failure analysis

Media retention

	ztC Edge 250i
Compute	Intel Xeon W-1290TE, 1.8 GHz, 20 MB cache, 10 HT cores
Memory	64 GB DDR4 2666 MHz (ECC)
Storage	2 TB SSD (NVMe)
Networking	2 x 10 GbE (for a-links) 6 x 1 GbE (for networks)
Operating Temperature ¹	–20 to 60 °C (–4 to 140 °F)
Humidity	95% @ 40 °C (non-condensing)
Shock and vibration	10G, 11 ms 1.5 Grms @ 5 – 500 Hz
Input power ²	9V - 36V (DC)
Dimensions	230 x 192 x 127 mm (9.1 x 7.6 x 5.0 in)
Weight	4.6 kg (10.2 lbs)
Availability support	Fault tolerance and high availability
Certifications ³	CI D2, FCC, CE, and others ³
Host OS support ⁴	Stratus Redundant Linux ⁴
Guest OS support ⁵	Windows and Linux ⁵

Technical specifications: The second generation ztC Edge 250i may be wall or DIN rail mounted, and offers a fan-less, solid state design. The ztC Edge 250i is a powerful system that can support large software workloads that require more storage, processing power, and the choice of high availability or fault tolerance.



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¹ Operating temperature ranges listed are for DC power. When AC power is used (using an optional AC Adapter), the recommended range for the ztC Edge 250i is 0 to 50 °C (32 to 122 °F).

² An optional AC Adapter (100-240V, 2.5A, 50-60Hz) may also be used.

³ <https://www.stratus.com/services-support/customer-support/platform-support/ztc-edge-certification/>

⁴ <https://www.stratus.com/services-support/customer-support/platform-support/ztc-edge-host-operating-system-support/>

⁵ <https://www.stratus.com/services-support/customer-support/platform-support/ztc-edge-guest-operating-system-support/>

Other Edge Computing platforms from Stratus

In addition to ztC Edge, Stratus offers [ztC Endurance](#), which enables organizations to run critical applications without downtime or data loss, in edge or data center environments. The platform protects critical applications and data using intelligent, predictive fault tolerance based on Stratus' proven redundant hardware architecture, hardened drivers, and Stratus Automated Uptime Layer with Smart Exchange™ combined with Intel RAS technology and embedded security features. For more information about ztC Endurance, please visit www.stratus.com/ztc-endurance.

Additionally, Stratus offers [ftServer](#), a rack mount fault tolerant server that is designed to run larger scale tier-1 mission critical workloads. Supporting 30+ VMs, ftServer delivers continuously available manufacturing operations and centralized control applications. For more information about ftServer, please visit www.stratus.com/ftserver.

For more information about [Stratus ztC Edge](#), and other reliable edge computing solutions from Stratus, please contact your local sales representative, or visit www.stratus.com/ztc-edge

Find out more

For more information, or to purchase Stratus products, please call 1-800-STRATUS, or visit www.stratus.com.