

Nodegrid Gate SR™

Deliver targeted functionality right where you need it

Nodegrid Gate SR™ (GSR) delivers converged infrastructure for more flexible networking. Deploy anywhere on your network to boost your provisioning capabilities and set up virtualized environments. Use the extensible **Nodegrid OS** to integrate third party and custom solutions, while the GSR serves as your convenient management gateway to all your end devices. Streamline your workload – from provisioning, to configuration, management, and beyond.

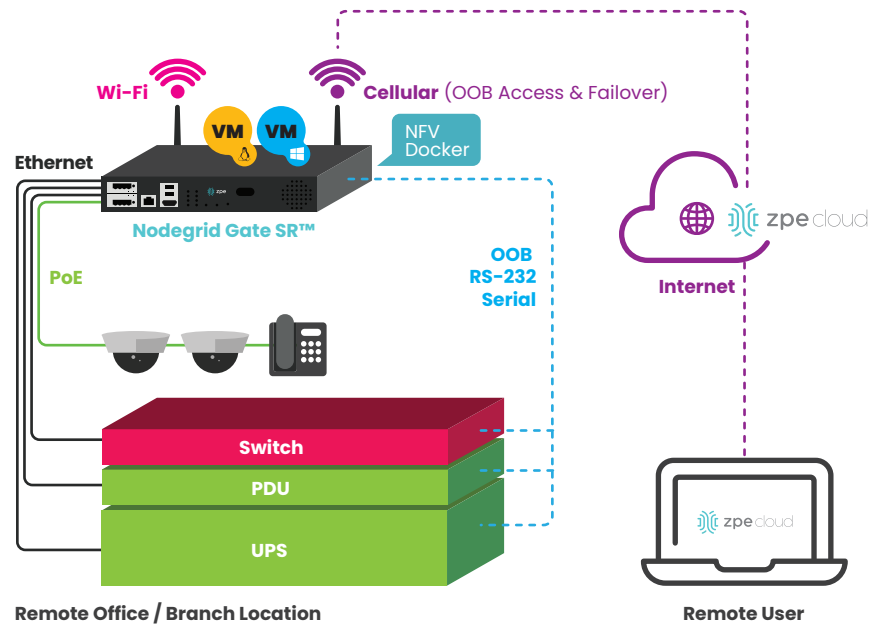


Benefits

- **Reduce CAPEX & OPEX expenses** with a consolidated, extensible solution & automated management
- **Reduce downtime & trips** to remote locations with instant remote access
- **Minimize MTR, downtime, & expenses** with secure, centralized remote device access & control
- **Increase site reliability** with open industry standard hardware & easy-to-use software

Features

- **Gen 3 Out-of-Band Management Integration**
- **Extensible Applications** with virtualization & containers
- **Zero Touch Provisioning (ZTP)** over the WAN for fast & easy setup in remote locations
- **Integrates with ZPE Cloud & Nodegrid Clustering Feature** for a unified, vendor-neutral management solution
- **Modern x86_64bit Linux Kernel** for fast security patching & widespread software availability
- **Extended Automation** based on actionable data
- **Failover to 5G/4G/LTE & Wi-Fi**
- **Encrypted Data Transit** with SSL, IPsec & Wireguard VPN technologies
- **DHCP Server** Extra IPs for your remote site or replace your current router altogether
- **Built-In Firewall**
- **Secure** Selectable encrypted cryptographic protocols & cypher suite levels, configuration checksum™
- **Power Control & Monitoring** Get alerts on IT device health & solve problems automatically
- **Automation/Orchestration** Puppet, Chef, Ansible, RESTful APIs



Use your GSR in with ZPE Cloud for even more time savings.

True Zero Touch Provisioning lets you automate deployments and configuration changes, including your connected end devices. Automate & create scripts to address issues before problems occur. **This powerful solution also features the Gen 3 out-of-band you expect from Nodegrid®.** Prevent downtime and instantly gain access to solutions and infrastructure – from SD-WAN and firewall applications, to serial consoles, PDUs, and IPMI devices.

Nodegrid Gate SR Interfaces

- 9X Gbit Ethernet (4 with PoE+)
- 8X Serial RS-232 Ports
- 2X SFP+
- 2X Digital IO
- 2X Cellular 5G/4G/LTE
- 1X Relay
- 1X OUT
- 1X Wi-Fi 5

Technical Specifications

Connectivity

- 1X 1 Gigabit Ethernet Port
- 2X SFP+ 10 Gigabit Ports
- Built-in switch with 4 PoE+ Gigabit Ethernet Ports
- Failover to 5G/4G/LTE modem with Dual SIM, Console Port
- 4X Gigabit Ethernet Ports
- Multiple Routing Tables

Managed Power Devices

Vendor-neutral PDU support

Managed IPMI Devices

OpenBMC, HP iLO, Dell iDRAC, Supermicro/Quanta IPMI, IPMI 2.0 compatible devices, Cisco CIMC/UCS, IBM IMM, Oracle ILOM, EMC/NetApp Storage IPMI

Sensors

- Support for a wide range of USB sensors

Managed Devices

- Serial devices, USB devices, Network devices, PDU, & IPMI devices

Networking

- IPv4 / IPv6 Support
- Embedded Layer 2 Switching, VLAN, Layer 3 Routing, BGP, OSPF, RIP, QoS, DHCP (Client & Server)

Port Access

- Direct access by port name, TCP port, device name & IPv4/IPv6
- High performance port login: <1 sec on SSH, <3 sec on Telnet
- 250+ simultaneous sessions
- Port sharing
- Command Line Interface (CLI)
- Port custom field support, port icon configuration, port search
- Device clustering across multiple Nodegrid units
- Break-over SSH support

System Management

- Extensible, automated control based on actionable real-time data
- Web GUI management portal, web console, Command Line Interface (CLI), Linux root shell, SNMP, RESTful API
- Zero Touch Provisioning (ZTP) via LAN/DHCP, WAN/ZPE Cloud, USB for configuration & firmware updates
- Multiple & customizable user levels of access
- Auto-discovery via network scan & custom probes
- SNMPv1,v2 & SNMPv3-v1 IPv4/IPv6 with MD5, SHA-224, SHA-256, SHA-384, SHA-512, DES, AES-192, AES-256
- Orchestration Integration & Automation: Puppet, Chef, Ansible, RESTful, ZPE Cloud & Nodegrid Cluster feature
- File sharing via FTP, NFS, SSHFS, Windows Sharing, web file browser, ZPE Cloud
- Remote Procedure Call (RPC, gRPC)
- NetFlow, LLDP

Operating System

Built-in x86_64bit Nodegrid OS

Warranty

2-Year Limited Warranty

Power Specifications

- 36V-75 VDC dual power input (redundant)
- Power consumption 45 W typical
- AC Power adapter (add-on), 100-240V~, 1.2A, 50-60Hz, Operating temperature: -25C – 60C

Access Protocols

HTTPS, SSHv2;(Optional) HTTP, Telnet & SSHv1

Device View Options

Tree, Table, Geo Map, Node, & WEB Interface with search



Security

- Hardened device with BIOS protection, TPM 2.0, UEFI Secure Boot, Signed OS, Self-Encrypted Disk (SED), Geofencing
- X.509 SSH certificate support, 4096-bit encryption keys
- Selectable cryptographic protocols for SSH & HTTPS (TLSv1.3, TLSv1.2, TLSv1.1, TLSv1)
- Selectable cypher suite levels: high, medium, low, custom
- IPsec, WireGuard, OpenSSL VPNStrongswan with support for multi sites
- Local, AD/LDAP, RADIUS, TACACS+, Kerberos, authentication
- SAML 2.0 support via Duo, Okta, Ping Identity, ADFS
- Two-Factor Authentication with RSA & DUO
- Local, backup-user authentication support
- User-access lists per port
- Group/role-based authorization: AD/LDAP, RADIUS, TACACS+, SAML2
- Fine grain & role-based access control
- Firewall: IP packet & security filtering, IP forwarding support
- MD5 / SHA System Configuration Checksum™
- System event logging to file, syslog, email, ZPE Cloud, Splunk & more
- Custom security settings
- Strong password enforcement

Data Logging & Notifications

- Local port buffering – 20 MB per port
- Local, NFS, syslog, off-line data logging
- Time stamp & rotation for data logging
- Event destination: email, syslog, local, syslog, email, ZPE Cloud, Splunk & more
- Notification: syslog, email, ZPE Cloud, Splunk & more

CPU & Storage (Upgrades Available)

- Intel x86_64 quad core
- 8-32GB DDR4 DRAM
- 32GB Hardware encrypted SSD

Interface

- 8X RJ45 Serial ports
- 2X SFP+ (10G)
- 1X Gigabit (10/100/1000BT) Ethernet interfaces on RJ45
- 4X Gigabit (10/100/1000BT) Ethernet interfaces on RJ45 with Built-in Switch
- 4X PoE+ Gigabit (10/100/1000BT) Ethernet interfaces on RJ45 with Built-in Switch
- 2X GPIO (Digital I/O TTL level 5.5V max @ 64mA)
- 1X Digital Out Port (Signal MOSFET Digital Output 2.5V to 60V @ 500mA max)
- 1X Relay Port (NC relay contact max 24V @ 1A)
- 2X USB 3.0 Host on Type A
- 2X USB 2.0 Hosts on Type A
- 1X Wi-Fi -(Optional)
- 2X 5G or 4G/LTE Cellular Modem Slots with Dual SIM (Optional)
- 1X HDMI port

Physical

- Front-Rear mounting brackets
- Size (L X W X H): 241.3 X 260.35 X 44.45 mm (9.5 X 10.25 X 1.75 in)
- Weight: 0.9 kg (2 lb)
- Shipping weight: 3.6 kg (8.0 lb)
- Shipping (L X W X H): 349.25 X 374.65 X 177.8mm (13.75 X 14.75 X 7 in)

Environmental

- Operation: -20 to 60° C (-4°F to 140° F), 5-95% RH, non-cond.
- Storage: -20 to 67° C (-4°F to 153° F), 5-95% RH, non-cond.

Ordering Information

Channel SKU	Description	CPU	Memory	Power	Special
ZPE-GSR-48-Base	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 13X ETH, (5 GbE, 4X PoE+, 2 SFP+), 4-Core Intel 64bit CPU, 8GB DDR4, 32GB SLC. Dual DC input (wide range DC). AC power adapter not included. Order ZPE-GSR-PSU separately. Order ZPE Cloud & app subscription. Includes Standard 2-Year Support, HW warranty, & 90-day ZPECloud.com subscription.	4 Cores	8GB	AC & DC	Base
ZPE-GSR-48-W5	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 11X ETH, (5 GbE, 4X PoE+, 2 SFP+), 4-Core Intel 64bit CPU, 8GB DDR4, 32GB SLC, Wi-Fi 5 (866Mbps 2X2 dual stream 802.11ac). Dual DC input (wide range DC). AC power adapter not included. Order ZPE-GSR-PSU separately. Order ZPE Cloud & app subscription. Includes Standard 2-Year Support, HW warranty, & 90-day ZPECloud.com subscription.	4 Cores	8GB	AC & DC	Wi-Fi
ZPE-GSR-48-4G	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 11X ETH, (5 GbE, 4X PoE+, 2 SFP+), 4-Core Intel 64bit CPU, 8GB DDR4, 32GB SLC, 4G LTE (CAT12). Dual DC input (wide range DC). AC power adapter not included. Order ZPE-GSR-PSU separately. Order ZPE Cloud & app subscription. Includes Standard 2-Year Support, HW warranty, & 90-day ZPECloud.com subscription.	4 Cores	8GB	AC & DC	4G
ZPE-GSR-48-4G-W5	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 11X ETH, (5 GbE, 4X PoE+, 2 SFP+), 4-Core Intel 64bit CPU, 8GB DDR4, 32GB SLC, 4G LTE (CAT12), Wi-Fi 5 (866Mbps 2X2 dual stream 802.11ac). Dual DC input (wide range DC). AC power adapter not included. Order ZPE-GSR-PSU separately. Order ZPE Cloud & app subscription. Includes Standard 2-Year Support, HW warranty, & 90-day ZPECloud.com subscription.	4 Cores	8GB	AC & DC	4G Wi-Fi
ZPE-GSR-48-4G-W5-D128G	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 11X ETH, (5 GbE, 4X PoE+, 2 SFP+), 4-Core Intel 64bit CPU, 8GB DDR4, 32GB SLC, 4G LTE (CAT12), Wi-Fi 5 (866Mbps 2X2 dual stream 802.11ac), Disk2:128GB. Dual DC input (wide range DC) with one AC power adapter & cord included. Order ZPE-GSR-PSU for additional power supply. Order ZPE Cloud & app subscription. Includes Standard 2-Year Support, HW warranty, & 90-day ZPECloud.com subscription.	4 Cores	8GB	AC & DC	4G Wi-Fi Second Storage
ZPE-GSR-48-5G	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 11X ETH, (5 GbE, 4X PoE+, 2 SFP+), 4-Core Intel 64bit CPU, 8GB DDR4, 32GB SLC, 5G LTE (Sub 6 with 4G/LTE CAT20). Dual DC input (wide range DC). AC power adapter not included. Order ZPE-GSR-PSU separately. Order ZPE Cloud & app subscription. Includes Standard 2-Year Support, HW warranty, & 90-day ZPECloud.com subscription.	4 Cores	8GB	AC & DC	5G
ZPE-GSR-816-Base	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 13X ETH, (5 GbE, 4X PoE+, 2 SFP+), 8-Core Intel 64bit CPU, 16GB DDR4, 32GB SLC. Dual DC input (wide range DC). AC power adapter not included. Order ZPE-GSR-PSU separately. Order ZPE Cloud & app subscription. Includes Standard 2-Year Support & HW warranty. Includes 90-day ZPECloud.com subscription.	8 Cores	16GB	AC & DC	Base
ZPE-GSR-816-W5	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 11X ETH, (5 GbE, 4X PoE+, 2 SFP+), 8-Core Intel 64bit CPU, 16GB DDR4, 32GB SLC, Wi-Fi 5 (866Mbps 2X2 dual stream 802.11ac). AC power adapter not included, order ZPE-GSR-PSU separately. Order ZPE Cloud & app subscription. Includes Standard 2-Year Support, HW warranty, & 90-day ZPECloud.com subscription.	8 Cores	16GB	AC & DC	Wi-Fi

Ordering Information

Channel SKU	Description	CPU	Memory	Power	Special
ZPE-GSR-816-4G	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 11X ETH, (5 GbE, 4X PoE+, 2 SFP+), 8-Core Intel 64bit CPU, 16GB DDR4, 32GB SLC, 4G LTE (CAT12). Dual DC input (wide range DC). AC power adapter not included, order ZPE-GSR-PSU separately. Order ZPE Cloud & app subscription. Includes Standard 2-Year Support, HW warranty, & 90-day ZPECloud.com subscription.	8 Cores	16GB	AC & DC	4G
ZPE-GSR-816-4G-W5	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 11X ETH, (5 GbE, 4X PoE+, 2 SFP+), 8-Core Intel 64bit CPU, 16GB DDR4, 32GB SLC, 4G LTE (CAT12), Wi-Fi 5 (866Mbps 2X2 dual stream 802.11ac). Dual DC input (wide range DC). AC power adapter not included. Order ZPE-GSR-PSU separately. Order ZPE Cloud & app subscription. Includes Standard 2-Year Support, HW warranty, & 90-day ZPECloud.com subscription.	8 Cores	16GB	AC & DC	4G Wi-Fi
ZPE-GSR-816-4G-W5-D128G	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 11X ETH, (5 GbE, 4X PoE+, 2 SFP+), 8-Core Intel 64bit CPU, 16GB DDR4, 32GB SLC, 4G LTE (CAT12), Wi-Fi 5 (866Mbps 2X2 dual stream 802.11ac), Disk2:1216GB. Dual DC input (wide range DC). AC power adapter not included, order ZPE-GSR-PSU separately. Order ZPE Cloud & app subscription. Includes Standard 2-Year Support, HW warranty, & 90-day ZPECloud.com subscription.	8 Cores	16GB	AC & DC	4G Wi-Fi Second Storage
ZPE-GSR-816-5G	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 11X ETH, (5 GbE, 4X PoE+, 2 SFP+), 8-Core Intel 64bit CPU, 16GB DDR4, 32GB SLC, 5G LTE (Sub 6 with 4G/LTE CAT20). Dual DC input (wide range DC). AC power adapter not included. Order ZPE-GSR-PSU separately. Order ZPE Cloud & app subscription. Includes Standard 2-Year Support, HW warranty, & 90-day ZPECloud.com subscription.	8 Cores	16GB	AC & DC	5G

Accessories

ZPE-GSR-PSU ZPE Nodegrid Gate SR. Power Supply (Primary & Secondary)

Support

ZPE-GSR-TX-BASE-ALL-EW1G ZPE Nodegrid Gate SR. 1Y 24X7 Gold Upgrade Support
 ZPE-GSR-TX-BASE-ALL-EW2G ZPE Nodegrid Gate SR. 2Y 24X7 Gold Upgrade Support
 ZPE-GSR-TX-BASE-ALL-EW3G ZPE Nodegrid Gate SR. 3Y 24X7 Gold Upgrade Support



NOTE: If you need more storage or other combinations please contact ZPE Sales: sales@zpesystems.com



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FCC ID: 2ARCQ-EM7565
IC: 24339-EM7565

003-200132
D200112003

FCC ID: N7NEM91
IC: 2417C-EM91

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FCC ID: RYK-261ACNBT
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