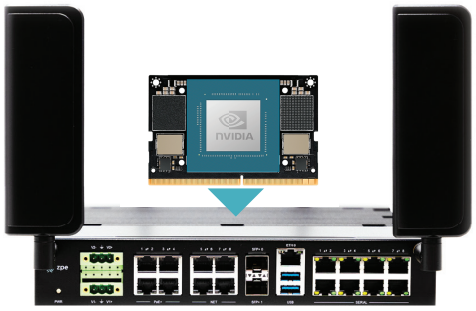
Nodegrid Gate SR™ with Nvidia Jetson Nano

Gen 3 Out-of-Band Management Solution
with Jetson Nano for Edge AI Workloads

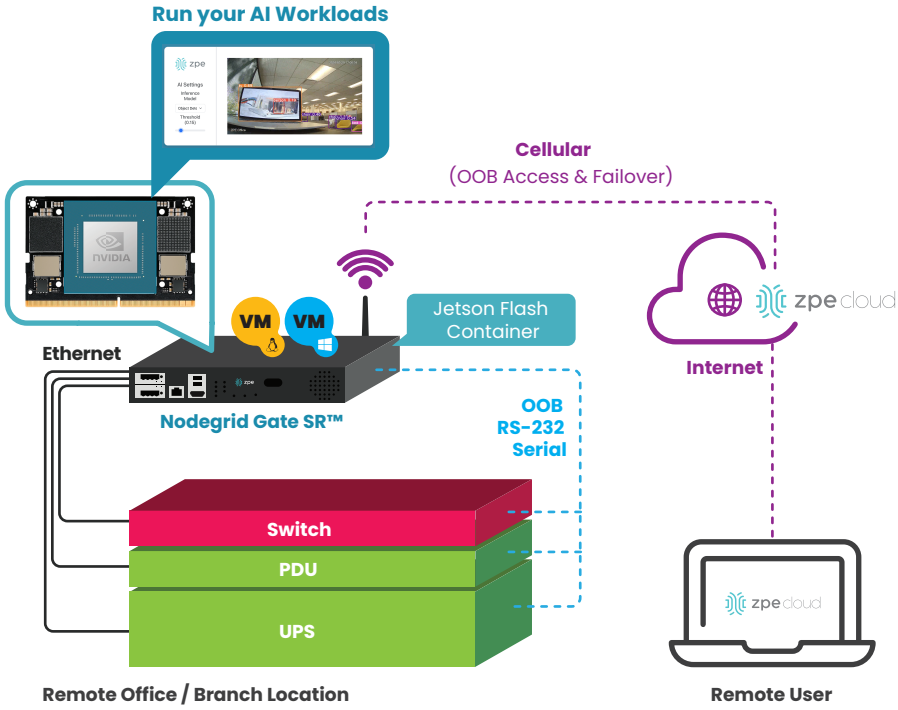


Benefits

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

Features

- Jetson Orin Nano - 8GB
  - 128GB NVME Storage
- 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



AI Ready Platform for Edge Deployments

The Nodegrid Gate SR with Nvidia Jetson Nano card inside means you can quickly provision, deploy, and scale AI edge workloads, all from within a single solution.

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

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, OSFP, 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 8-core CPU
- 16GB 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: -40 to 60° C (-40 °F to 176° F), 5-95% RH, non- cond.
- Storage: -20 to 80° C (-4°F to 153° F), 5-95% RH, non-cond.

Technical Specifications (Continued..)

External Power Supply
- IEC 60950, IEC 62368

Internal Power Converter
- IEC 60068

Electrical Isolation
- IEC 60950, IEC 62368

EM Compatibility
- EN 61000-3-2:2014
- EN 61000-3-3:2013
- IEC 61000-4-2: 2008
- IEC 61000-4-3: 2006 + A1: 2007 + A2:2010
- IEC 61000-4-4:2012
- IEC 61000-4-5:2014+A1:2017
- IEC 61000-4-6: 2013+ COR1:2015
- IEC 61000-4-8: 2009
- IEC 61000-4-11:2004 + A1:2017
- IEC 61000-4-11:2004 + A1:2017
- EN 61000-4-2: 2009
- EN 61000-4-3: 2006 + A1: 2008 + A2:2010
- EN 61000-4-4:2012
- EN 61000-4-5:2014+A1:2017
- EN 61000-4-6: 2014+AC:2015
- EN 61000-4-11:2004 + A1:2017
- EN 55032: 2015/ AC: 2016
- EN 55035: 2017

Ordering Information

Channel SKU	Description	CPU	Memory	Power	Special
ZPE-GSR-816-NVJN-D128G	ZPE Nodegrid Gate SR. 8X RJ45 Serial rolled, 11X ETH, (5X GbE, 4X PoE+, 2X SFP+), 8-Core Intel 64bit CPU, 16GB DDR4, 32GB SLC. Disk2:128GB. 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. Nvidia Jetson Orin Nano 8GB AI Module Included * *** Requires Docker License (Sold Seperately)**	8 Cores	16GB	AC & DC	Nvidia Jetson Orin Nano 8GB

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

ICES-003 (A) NMB-003(A) RoHS Compliant Anatel: 01127-22-14117

R 003-170295 T D170171003 FCC ID: 2ARCQ-EM7565 IC: 24339-EM7565

R 003-200132 T D200112003 FCC ID: N7NEM91 IC: 2417C-EM91

R 020-170122 FCC ID: RYK-261ACNBT IC: 6158A-261ACNBT