

# Nodegrid™ Serial Console – Core Edition

Secure Remote Access and Control for IT Devices

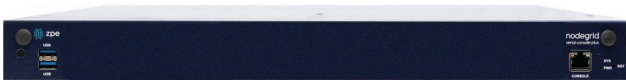
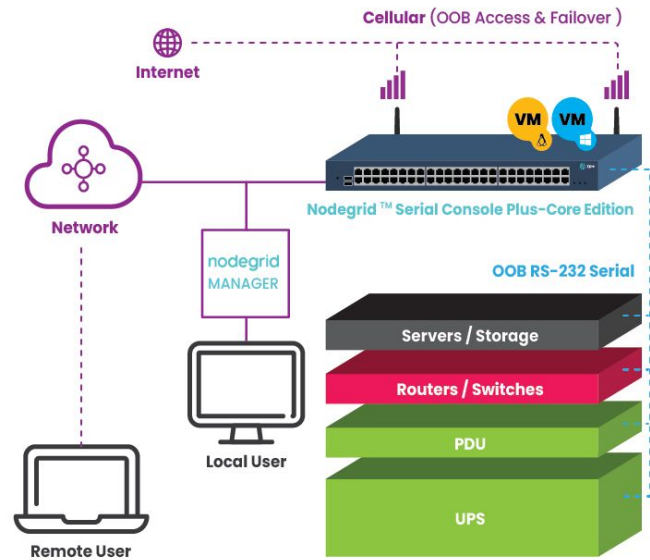
**Nodegrid™ Serial Console – Core Edition (NSCP-CE)** is the data center’s next-generation serial console server. The NSCP-CE provides essential serial console functionality for secure remote access and power management to all Legrand rack PDUs. It offers fast, secure, and reliable in-band and out-of-band access to servers, networks, storage, power, and other serially-connected devices for faster problem resolution.

## Benefits

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

## Features

- Gen 3 Out-of-Band Management Integration
- Centralized configuration and automation via Zero-Touch-Provisioning (ZTP)
- Integrates with ZPE Cloud for a vendor-neutral, unified management solution
- Modern x86-64bit Linux Kernel for fast security patching and widespread software availability
- Failover to 4G/5G/LTE & Analog Modem
- Built-in firewall
- Secure Selectable encrypted cryptographic protocols & cypher suite levels, configuration checksum™
- Power Control for ServerTech and Raritan rack PDUs



NSCP - Core Edition | Front side



NSCP - Core Edition | Back side

## Simple & Fast

No more waiting! The NSCP-CE uses native or ZPE Cloud-based Zero Touch Provisioning capabilities. This allows users to remotely deploy the units anywhere in the world quickly and easily. Its modern, 64-bit Nodegrid OS can handle 100+ concurrent sessions, allowing for more operations, users, and I/O than most other console servers.

## Secure & Sustainable

The NSCP-CE keeps your information secure. It blends existing policy-based enterprise AD/LDAP/SAML authentication and authorization with the latest in cryptographic protocols and cypher suite levels, threat prevention, up-to-date SSL and SSH data encryption, IP filtering, secure boot, TPM, and a system configuration checksum.

## Reliable & Scalable

The NSCP-CE reliably scales from single standalone systems, to large enterprise environments. Users can scale to any size environment with this cloud-based out-of-band solution, which was designed by award-winning industry veterans and built using modular, secure industry-standard hardware components.

## Technical Specifications

### Accessibility

- 2 x SFP Ethernet ports and 2 x Gigabit Ethernet ports with Multiple Routing Table and fail-over to 5G/4G/LTE modem with Dual SIM and Console Port

### Managed Power Devices

- ServerTech and Raritan Rack PDU's

### Sensors

- Support for a wide range of USB sensors

### Networking

- IPv4 / IPv6 Support
- VLAN, LACP, LLDP support

### Port Access

- Direct access by port name, TCP port, device name and IPv4/IPv6
- 100+ simultaneous sessions
- Port sharing
- Command line interface (CLI)
- Port custom field support, port icon configuration, port search
- Break-over SSH support

### System Management

- Web GUI management portal, command line interface (CLI), SNMP, RESTful API
- Zero Touch Provisioning (ZTP) via LAN/DHCP, WAN/ZPE Cloud, USB for configuration and firmware updates
- Multiple and customizable user levels of access
- SNMPv1,v2 and SNMPv3-v1 IPv4/IPv6
- Orchestration Integration and Automation: ZPE Cloud, RESTful
- Remote Procedure Call (RPC, gRPC)

### Security

- Hardened device with BIOS protection, TPM 2.0, UEFI Secure Boot, Signed OS
- X.509 SSH certificate support, 4096-bit encryption keys
- Selectable cryptographic protocols for SSH and HTTPS (TLSv1.3, TLSv1.2, TLSv1.1, TLSv1)
- Selectable cypher suite levels: high, medium, low, custom
- Local, AD/LDAP, RADIUS, TACACS+, Kerberos, authentication
- SAML 2.0 support via Duo, Okta, Ping Identity, ADFS
- Two-factor authentication with RSA and DUO
- Local backup-user authentication support
- User-access lists per port
- Group/Role-Based Authorization: AD/LDAP, RADIUS, TACACS+
- Fine grain and role-based access control
- Firewall: IP packet and security filtering, IP forwarding support

### Security (Continued)

- MD5 / SHA System Configuration Checksum™
- System event logging to file, Syslog, email, ZPE Cloud
- Custom security settings
- Strong password enforcement

### Access Protocols

- HTTPS, SSHv2; optional HTTP, Telnet and SSHv1

### Data Logging & Notifications

- Local port buffering: 20 MB per port
- Local, NFS, Syslog, off-line data logging
- Time stamp and rotation for data logging
- Event destination: Local, Syslog, Email, ZPE Cloud
- Notification: Local, Syslog, Email, ZPE Cloud

### Operating System

- Built-in x86-64bit Nodegrid OS

### Power Specifications

- 40V-63 VDC dual power input (redundant)
- Dual AC: 100-240 VAC, 50/60 Hz
- Power consumption 45 W typical

### Warranty

- 2-Year Limited Warranty

### CPU & Storage

- Intel x86\_64 Dual-Cores
- 4GB of DDR4 DRAM
- 16GB FLASH

### Interfaces

- 16, 32, 48 RS-232 serial ports on RJ45 @ 230,400 bps max/port
- 2X SFP (1 Gb)
- 2 x Ethernet (10/100/1000BT) interfaces on RJ45
- 1X RS-232 serial console port on RJ45
- 2X USB 3.0 Host on Type A connector
- 1X 5G/4G/LTE Slot (Optional)
- 1X Analog Modem (Optional)

### Physical

- Front-Rear Mounting Brackets
- Size (L x W x H): 443 x 312 x 43 mm (17.4 x 12.3 x 1.7 in), 1U
- Weight: 5.265 kg (11.6 lb), depending on options
- Shipping Weight: 8.745 kg (19.3 lb)
- Shipping (L x W x H): 533 x 497 x 209 mm (21 x 19.6 x 8.3 in)

### Environmental

- Operation: 0 to 60° C (32°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	Ports
ZPE-NSCP-T16R-CORE-DAC	ZPE Nodegrid Serial Core Edition. 16-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0. Dual AC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DAC	16
ZPE-NSCP-T16R-CORE-DAC-4G	ZPE Nodegrid Serial Core Edition. 16-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, 4G LTE (CAT12). Dual AC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DAC	16
ZPE-NSCP-T16R-CORE-DAC-5G	ZPE Nodegrid Serial Core Edition. 16-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, 5G LTE (CAT20). Dual AC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DAC	16
ZPE-NSCP-T16R-CORE-DAC-AM	ZPE Nodegrid Serial Core Edition. 16-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, Analog Modem. Dual AC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DAC	16
ZPE-NSCP-T16R-CORE-DDC	ZPE Nodegrid Serial Core Edition. 16-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0. Dual DC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DDC	16
ZPE-NSCP-T16R-CORE-DDC-4G	ZPE Nodegrid Serial Core Edition. 16-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, 4G LTE (CAT12). Dual DC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DDC	16
ZPE-NSCP-T16R-CORE-DDC-5G	ZPE Nodegrid Serial Core Edition. 16-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, 5G LTE (CAT20). Dual DC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DDC	16
ZPE-NSCP-T16R-CORE-DDC-AM	ZPE Nodegrid Serial Core Edition. 16-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, Analog Modem. Dual DC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DDC	16
ZPE-NSCP-T32R-CORE-DAC	ZPE Nodegrid Serial Core Edition. 32-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0. Dual AC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DAC	32
ZPE-NSCP-T32R-CORE-DAC-4G	ZPE Nodegrid Serial Core Edition. 32-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, 4G LTE (CAT12). Dual AC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DAC	32
ZPE-NSCP-T32R-CORE-DAC-5G	ZPE Nodegrid Serial Core Edition. 32-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, 5G LTE (CAT20). Dual AC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DAC	32

## Ordering Information

Channel SKU	Description	CPU	Memory	Power	Ports
ZPE-NSCP-T32R-CORE-DAC-AM	ZPE Nodegrid Serial Core Edition. 32-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, Analog Modem. Dual AC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DAC	32
ZPE-NSCP-T32R-CORE-DDC	ZPE Nodegrid Serial Core Edition. 32-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0. Dual DC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DDC	32
ZPE-NSCP-T32R-CORE-DDC-4G	ZPE Nodegrid Serial Core Edition. 32-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, 4G LTE (CAT12). Dual DC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DDC	32
ZPE-NSCP-T32R-CORE-DDC-5G	ZPE Nodegrid Serial Core Edition. 32-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, 5G LTE (CAT20). Dual DC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DDC	32
ZPE-NSCP-T32R-CORE-DDC-AM	ZPE Nodegrid Serial Core Edition. 32-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, Analog Modem. Dual DC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DDC	32
ZPE-NSCP-T48R-CORE-DAC	ZPE Nodegrid Serial Core Edition. 48-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0. Dual AC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DAC	48
ZPE-NSCP-T48R-CORE-DAC-4G	ZPE Nodegrid Serial Core Edition. 48-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, 4G LTE (CAT12). Dual AC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DAC	48
ZPE-NSCP-T48R-CORE-DAC-5G	ZPE Nodegrid Serial Core Edition. 48-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, 5G LTE (CAT20). Dual AC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DAC	48
ZPE-NSCP-T48R-CORE-DAC-AM	ZPE Nodegrid Serial Core Edition. 48-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, Analog Modem. Dual AC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DAC	48
ZPE-NSCP-T48R-CORE-DDC	ZPE Nodegrid Serial Core Edition. 48-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0. Dual DC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DDC	48
ZPE-NSCP-T48R-CORE-DDC-4G	ZPE Nodegrid Serial Core Edition. 48-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, 4G LTE (CAT12). Dual DC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DDC	48

## Ordering Information

Channel SKU	Description	CPU	Memory	Power	Ports
ZPE-NSCP-T48R-CORE-DDC-5G	ZPE Nodegrid Serial Core Edition. 48-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, 5G LTE (CAT20). Dual DC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DDC	48
ZPE-NSCP-T48R-CORE-DDC-AM	ZPE Nodegrid Serial Core Edition. 48-port Cisco Rolled, 2-Core CPU, 4GB DDR4, 16GB SSD, 2 SFP, 2 GbE, 2 USB 3.0, Analog Modem. Dual DC Power adaptor and cord included. Order ZPE-cloud and app subscription. Includes Standard 2 year support and HW warranty.	2 Cores	4GB	DDC	48

## Ordering Information

### Support License - 1 Year - Subscription

SKU	Description
ZPE-NSCP-T16R-CORE-ALL-EW1G	ZPE Nodegrid Serial Core Edition 16-port, All Models - 1Y - 24x7 Gold Upgrade Support
ZPE-NSCP-T32R-CORE-ALL-EW1G	ZPE Nodegrid Serial Core Edition 32-port, All Models - 1Y - 24x7 Gold Upgrade Support
ZPE-NSCP-T48R-CORE-ALL-EW1G	ZPE Nodegrid Serial Core Edition 48-port, All Models - 1Y - 24x7 Gold Upgrade Support

### Support License - 2 Year - Subscription

SKU	Description
ZPE-NSCP-T16R-CORE-ALL-EW2G	ZPE Nodegrid Serial Core Edition 16-port, All Models - 2Y - 24x7 Gold Upgrade Support
ZPE-NSCP-T32R-CORE-ALL-EW2G	ZPE Nodegrid Serial Core Edition 32-port, All Models - 2Y - 24x7 Gold Upgrade Support
ZPE-NSCP-T48R-CORE-ALL-EW2G	ZPE Nodegrid Serial Core Edition 48-port, All Models - 2Y - 24x7 Gold Upgrade Support

### Support License - 3 Year - Subscription

SKU	Description
ZPE-NSCP-T16R-CORE-ALL-EW3G	ZPE Nodegrid Serial Core Edition 16-port, All Models - 3Y - 24x7 Gold Upgrade Support
ZPE-NSCP-T32R-CORE-ALL-EW3G	ZPE Nodegrid Serial Core Edition 32-port, All Models - 3Y - 24x7 Gold Upgrade Support
ZPE-NSCP-T48R-CORE-ALL-EW3G	ZPE Nodegrid Serial Core Edition 48-port, All Models - 3Y - 24x7 Gold Upgrade Support