NR4400 Network Resilience Platform
with Total Out-of-Band™ Management

Datasheet

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Operational Resilience Simplified

The NR4400 Network Resilience as a Service™ platform is an edge compute solution that combines Total Out-of-Band™ Management, Smart Automation, 4G LTE connectivity, and ZERO cloud-based centralized management.

The NR4400 is ideal for network deployments, device management, and remediation of network infrastructure at remote locations in high density, mission critical data centers, colocations, and enterprise edge networks. The NR4400 is purpose built for today's demanding network requirements.

ZERO Operational Resilience as a Service™ platform provides a centralized view and single pane of management of your Gearlinx™ NR4400 fleet and 3rd party devices. It is an innovative "pay as you go" SaaS consumption model that allows you to configure, monitor, manage network devices and alert on device events, subscription status, warranty information, serial numbers, and location.

- 16 or 48 RJ45 software selectable serial ports
- Dual 10Gb SFP+ multi rate
- Secure boot, TPM 2.0 physical security for remote provisioning
- Optional Embedded Global 4G LTE Module – Dual SIM with carrier, auto switching and failover
- Open Container Initiative (OCI) containers, Linux KVM Support
- Guest OS including SONiC
- Zero Touch Provisioning, RestAPI

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Console Port Specifications

NR4416	16 x RJ45 RS232 software selectable serial ports straight or rollover pinout
NR4448	48 x RJ45 RS232 software selectable serial ports straight or rollover pinout

Interface Ports

Primary/Secondary Network Ports	2 x 10/100/1000 Gigabit Ethernet, 2 x 1GbE/10GbE SFP+ multi-rate ports
Local Console Port	1 x RJ45 RS232 Serial Port Straight or Rolled (physically switched)
Managed Serial Ports	16, 48 x RJ45 RS232 software selectable 50 to 230,400 bps console ports
USB Ports	1 x USB 3.0 and 8 USB 2.0 ports for device console management
Remote Access	Integrated Dual SIM 4G LTE cellular module

Power Requirements

Dual AC	Dual socket universal IEC C14 inlet 100-240V AC 50/60 Hz
Power Consumption	Noncellular 18W, Cellular 21W
Cooling	Passive cooling. Forward or reverse mountable

Cellular Connectivity

Connectors	(2) 50 Ω SMA (center pin: female)
SIM Slots	(2) Mini-SIM (2FF); software slectable, hardware switchable
Coverage	Global LTE Support
Speed	CAT12
Cellular Bands	LTE-FDD B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28; LTE-TDD B38/B39/B40/B41; WCDMA B1/B2/B4/B5/B6/B8/B19; GSM B2/B3/B5/B8

Memory and CPU

Memory	8GB DDR4
CPU	2.0 GHz ARM Cortex A72 4-core
Boot ROM	Boot/Firmware
Internal Storage	Internal Storage (Logs, Containers, VMs): 64 GB SSD storage
Configuration Storage	512MB NAND

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Security, Encryption, and Authentication

Trusted Platform Module 2.0	TPM 2.0 physical security for remote provisioning
Embedded Firewall	nftables
VPN Tunnels	Wireguard and IPSec
Athentication Methods	AAA – TACACS+, RADIUS, Active Directory/OpenLDAP, local fallback
Hardware Secure Boot	SoC enforced bootloader signature checking

Edge Compute

Open Container Initiative	(OCI) Container Support, Linux KVM Virtualization Support

Features

Software Features	Gearlinux, Total Out-of-Band, Modern Enterprise GUI/CLI, IPv4/IPv6, Serial Logging, Single Sign On using OpenID
Operating Temperature	-5C° to 50C°, 23F° to 122F° (passive cooling)
Storage Temperature	-30C° to 60C°, -22F° to 140°
Humidity	5% to 95% (non-condensing)
MTBF	150,000 hours
Environmental Monitoring	Built-in temperature sensor

Regulatory Approvals

Cellular	PTCRB; GCF, AT&T, Verizon, T-Mobile; Canada
Certifications, Emissions	FCC Part 15, Subpart B, Class A; CE, RCM; CAN ICES-3 (B)/NMB-3 (B), ROHS

Physical

Product Dimensions	1RU 17.25" x 10.25" x 1.75", 43.82cm x 26.04cm x 4.45cm
Product Weight	7.7 lbs, 3.5kg
Status LEDs	NET1, NET2 (Ethernet Link and Speed LEDs), Information, Network Link, Cellular Module, ZERO Connection, Heartbeat, User Session Active, Power Supply 1, Power Supply 2
Enclosure	Metal, reverse mountable

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Part Numbers and Subscription Options

Part Number	Serial Ports	1GbE	10GbE SFP+	Global Cellular 4G LTE	Power Input
NR4416	16	2 x (RJ45 | SFP)	2 x SFP+	-	Dual AC
NR4416-L	16	2 x (RJ45 | SFP)	2 x SFP+	Yes	Dual AC
NR4448	48	2 x (RJ45 | SFP)	2 x SFP+	-	Dual AC
NR4448-L	48	2 x (RJ45 | SFP)	2 x SFP+	Yes	Dual AC

In an effort to reduce e-waste on our planet, Gearlinx™ ships the NR4400 products without power cables. If you would like to purchase power cables from us, you can do so based on the region it is shipping to. See ordering information details in the "power cables" section of this catalog.

Part Number	Required Licensing Subscription Renew subscription based on your life cycle preference
ORAAS-4400-1Y	Subscription License NR4400 Series - 1 Year of Enrollment Units, ZERO Cloud Portal, 1 Year Hardware Warranty, 1 Year Technical Phone Support, Web Support
ORAAS-4400-3Y	Subscription License NR4400 Series - 3 Years of Enrollment Units, ZERO Cloud Portal, 3 Years Hardware Warranty, 3 Years Technical Phone Support, Web Support
ORAAS-4400-5Y	Subscription License NR4400 Series - 5 Years of Enrollment Units, ZERO Cloud Portal, 5 Years Hardware Warranty, 5 Years Technical Phone Support, Web Support
ORAAS-4400-7Y	Subscription License NR4400 Series - 7 Years of Enrollment Units, ZERO Cloud Portal, 7 Years Hardware Warranty, 7 Years Technical Phone Support, Web Support
ORAAS-COTERM	Subscription License Renewal NR4400 Series – One (1) Enrollment Unit added to Gearlinx ZERO Cloud Portal Organization

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Package Contents

444010	2 x Cellular Antennas - L only
444020	Cable - Straight through CAT5 - 6'
444030	Adapter - Straight pinout DB9F to RJ45 crossover serial - DTE
444040	Rack Mount Kit (ears and screws)
NRQSG	NR Quick Start Guide

Optional Accessories

444030	Adapter - Straight pinout DB9F to RJ45 crossover serial - DTE
444031	Adapter - Straight pinout DB9F to RJ45 straight serial - DCE
444032	Adapter - Straight pinout DB9M to RJ45 straight serial - DCE
444020	Cable - Straight through CAT5 - 6'
444040	Rack Mount Kit (ears and screws)
444010	2 x Cellular Antennas
444011	Antenna Extender - Magnetic Base with 10' Coaxial Cable

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NR4400 Power Cables (sold separately)

All power cables are 6 feet/1.83m long and rated for 10 Amps

Part Number	Item	Description
444000		US Power Cord NEMA 5-15 to C13, Type B
444001		Europe Power Cord EU Angled CEE7/7 to C13, Type F/C
444002		UK Power Cord UKBS1363, Type G
444003		Australia/NZ Power Cord AU AS3112 to C15, Type 1
444004		Japan Power Cord JP Japan JISC8308 to C13, Type B-PSE
444005		China Power Cord CN China GB2099 to C13, Type GB2099
444006		IEC C14 to C13 10A 6 Power Cable

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