



Key Features

- Intel® Xeon® D-2800/D-2700 Series Processors
- Up to 8x DDR4 2933MHz ECC DIMMs
- 4x 25GbE SFP28 Fiber ports up to 100Gbps throughput
- 3x OCP NIC 3.0 slots
- 2x 2.5" HDD/SSD, 1x M.2 Key M for storage
- 1x M.2 Key B for Cellular module
- 1x M.2 Key E for WiFi module
- IPMI with AST2500 BMC
- Onboard TPM 2.0 for security

SPECIFICATION

Form Factor	1U 19" Rackmount
CPU	Intel® Xeon® D-2800/D-2700 Series Processors Up to 22 cores, 135W TDP
BIOS	AMI Aptio® V UEFI BIOS
IPMI	AST2500 BMC Firmware: AMI
System Memory	Total 8 DIMMs (2DPC) (1DPC) 4x DDR4 3200MHz ECC/Non-ECC RDIMM/ LRDIMM/ UDIMM, up to 512GB (2DPC) 8x DDR4 2933MHz ECC/Non-ECC RDIMM/ LRDIMM/UDIMM, up to 1024GB
Expansion	OCP NIC 3.0 slots (extended depth): <ul style="list-style-type: none"> • 2x PCIe Gen4 x16 from CPU • 1x PCIe Gen3 x8 from HSIO M.2: <ul style="list-style-type: none"> • 1x M.2 Key B 3052 socket with dual SIM card slots (PCIe, SATA, USB) • 1x M.2 Key E 2230 socket (PCIe)
Ethernet Ports	<ul style="list-style-type: none"> • 4x 10/25GbE SFP+/SFP28, Max 100Gbps throughput • 1x GbE RJ45 MGMT via Intel® Ethernet Controller I210 • 1x GbE RJ45 IPMI
Storage	2x 2.5" SATA 3.0 HDD/SSD 1x M.2 Key M 2280 socket (NVMe) Supports Intel® VROC
Power Supply	600W Redundant AC Power Supply AC 100V-240V @47Hz-63Hz
Cooling	CPU: Passive heatsink System: 5x fans
Security	Onboard TPM 2.0
OS Support	Linux
Dimension	438mm (W) x 524mm (D) x 44mm (H) 17.24" (W) x 20.63" (D) x 1.73" (H)

I/O

Serial Port	1x RJ45 Console port
USB	2x USB 3.2 Gen 1 ports, Type A 3x USB 2.0 headers onboard
LCD Panel	(Optional) 2x16 characters, 4x keypads
Display	1x VGA header at rear I/O
LED	Power/HDD LEDs
Power	Front: 1x Power button 1x Reset button Rear: 2x AC/DC power inlets (select models)

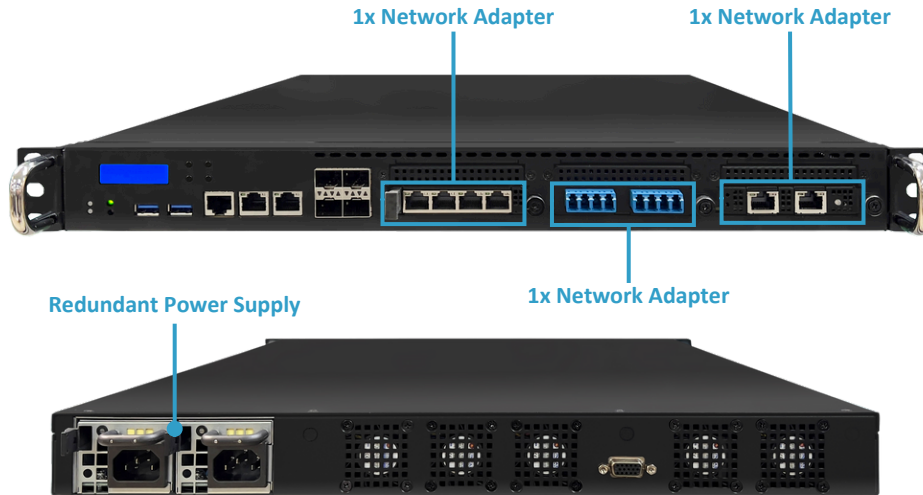
ENVIRONMENT

Operating Environment	0°C to 40°C (32°F to 104°F)
Storage Environment	-20°C to 70°C (-4°F to 158°F)
Humidity	5% to 95% RH, non-condensing

CERTIFICATION

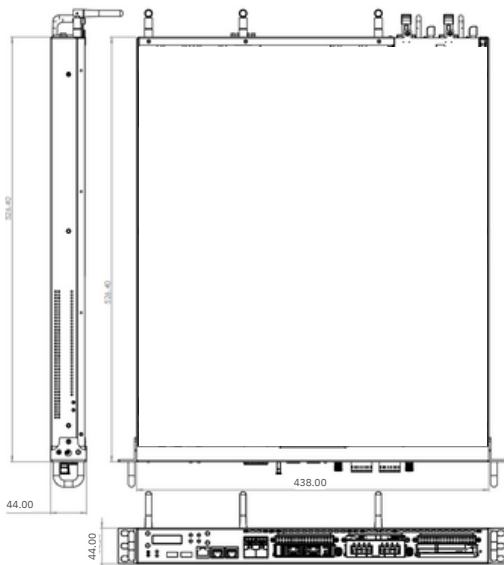
Certification	CE/FCC Compliance
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PRODUCT I/O VIEW



DIMENSION

Unit: mm



ORDERING GUIDE

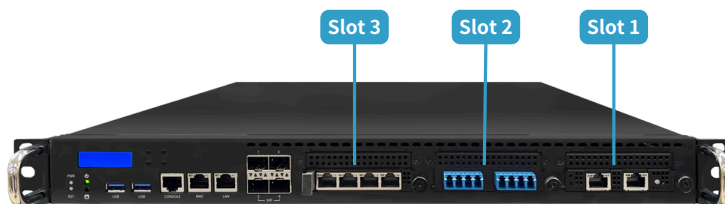
510-24-0020	(R). PNSR-5001. 1U Network System with Intel® Xeon® D-2800/D-2700 Series SoC
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*Optional NICs

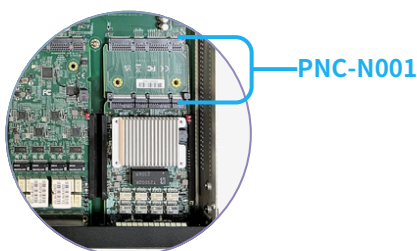
530-23-0001	PNC-OB2R-G10. OCP NIC 3.0 kit. 2x 10G RJ45. Bypass. Tall bracket
530-24-0022	PNC-EB4S-G10. OCP NIC 3.0 kit. 4x 10G SFP+. Bypass. Short range. Tall bracket
530-24-0024	PNC-EB4S-G10. OCP NIC 3.0 kit. 4x 10G SFP+. Bypass. Long range. Tall bracket
530-24-0025	PNC-EB8R-G2. OCP NIC 3.0 Extended kit. 8x 2.5G RJ45. Bypass
530-24-0026	PNC-EB4R-G2. OCP NIC 3.0 kit. 4x 2.5G RJ45. Bypass. Tall bracket
530-24-0028	PNC-ON4S-G25. OCP NIC 3.0 kit. 4x 25G SFP28. Tall bracket
530-24-0030	PNC-ON4S-G10. OCP NIC 3.0 kit. 4x 10G SFP+. Tall bracket
530-24-0032	PNC-ON4S-G1. OCP NIC 3.0 kit. 4x 1G SFP. Tall bracket
530-24-0035	PNC-OS4M. OCP 3.0 adapter kit for Four M.2 Expansion
530-24-0036	PNC-OS2M. OCP 3.0 adapter kit for Two M.2 Expansion

*All information provided is subject to change without notice. Last updated: October 22, 2025

NIC and Expansion Module Selection Guide



NIC & Expansion Module	Configuration	Bypass	Need PNC-N001 Card?	Slot 3 Gen4 x16	Slot 2 Gen4 x16	Slot 1 Gen3 x8
PNC-EB8R-G2	8x 2.5GbE RJ45	4 pairs	no	✓	✓	✓
PNC-EB4S-G10 (SR)	4x 10GbE SFP+	2 pairs	no	✓	✓	✓
PNC-EB4S-G10 (LR)	4x 10GbE SFP+	2 pairs	no	✓	✓	✓
PNC-EB4R-G2	4x 2.5GbE RJ45	2 pairs	no	✓	✓	✓
PNC-EB2Q-G100	2x 100GbE QSFP28	1 pair	no	✓	✓	Not recommended. Need Gen4 x16 for full bandwidth
PNC-OB2R-G10	2x 10GbE RJ45	1 pair	yes	✓	✓	✓
PNC-ON1Q-G200	1x 200GbE QSFP56	N/A	yes	✓	✓	Not recommended. Need Gen4 x16 for full bandwidth
PNC-ON2Q-G100	2x 100GbE QSFP28	N/A	yes	✓	✓	Not recommended. Need Gen4 x16 for full bandwidth
PNC-ON4S-G25	4x 25GbE SFP28	N/A	yes	✓	✓	Not recommended. Need Gen4 x16 for full bandwidth
PNC-ON4S-G10	4x 10GbE SFP+	N/A	yes	✓	✓	✓
PNC-ON4R-G10	4x 10GbE RJ45	N/A	yes	✓	✓	✓
PNC-ON4S-G1	4x 1GbE SFP	N/A	yes	✓	✓	✓
PNC-OS4M	4x M.2 Key M 2280	N/A	yes	✓	✓	Not recommended. Need Gen4 x16 for full bandwidth
PNC-OS2M	2x M.2 Key M 2280	N/A	yes	✓	✓	✓



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