

2025년 지속가능한 데이터센터 산업 발전 지원 사업 장비사양서

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1. 일반사항

1.1 개요

AI 시대 핵심 인프라인 데이터센터의 중요성이 급증하는 가운데, 국내 산업은 해외 기술 의존, 공급망 불안, 기술 자립 부족 등의 과제를 직면하기 위함이다.

데이터센터 테스트베드 조성은 국산 설비 및 소프트웨어의 성능과 신뢰성을 검증하고, 친환경적이고 지능적인 데이터센터 기술의 실증 및 최적화를 통해 국내 데이터센터 산업 생태계를 활성화하고 기술 자립도를 높이는 것을 목적으로 한다.

1.2 설비구성

구분	제조사	상세	수량
어플라이언스	Cisco PCA Network Appliance	Provider Connectivity Assurance Legacy Orchestrator Provider Connectivity Assurance Sensor Control Module Dock use to configure the SFP compute and Module Intel® Xeon® Processor SILVER 4510 30M Cache, 2.40 GHz, 12 core 32GB REG ECC DDR5 (4800Mhz) * 8ea 960GB / 3.5" / SAS *2ea	1
L3 스위치	Juniper	airflow out, redundant AC PSUs and FANs Ships with base S/W features PSS AR5 Support for QFX5120-48Y-D-AFO2 QFX5120-48Y-D-AFI2 QFX5120-48Y-AFO2 & QFX5120-48Y-AFI2 SFP+, 10GBASE-SR MMF OM3 300 meters and OM4 400 meters 12ea QSFP28, 100GE SR4, MMF OM3 70 meters and OM4 100 meters 22ea	4
관리용 L2 스위치	Juniper	EX4100 24-Port 10/100/1000BaseT 4x 10G SFP+ Uplink ports 4x 25G SFP28 Stacking/Uplink ports redundant fans 1 AC PSU JPSU-150-AC-AFO included (optics sold separately) wuth Standard SW	1

		EX4100 and EX3400 150W AC Power Supply Front-to-back airflow (power cord needs to be ordered separately) CBL-EX-PWR-C13-KR Power Cable PSS AR5 Support for X4100-24T-DC & EX4100-24T	
부하서버	Lenovo	ThinkSystem 32GB TruDDR5 4800MHz (2Rx8) RDIMM Select Storage devices - no configured RAID required ThinkSystem 2.5" VA 960GB Read Intensive SATA 6Gb HS SSD v2 ThinkSystem 2U 8x2.5" SAS/SATA Backplane ThinkSystem Broadcom 5719 1GbE RJ45 4-port OCP Ethernet Adapter ThinkSystem Mellanox ConnectX-6 Dx 100GbE QSFP56 2-port PCIe Ethernet Adapter ThinkSystem 1100W 230V/115V Platinum Hot-Swap Gen2 Power Supply v3 ThinkSystem 2U V3 Performance Fan Module ThinkSystem V3 2U SAS/SATA Y Cable from CFF C0,C1/C2,C3 to Front 8x2.5" BP ThinkSystem SR650 V3,PCIe Gen4 CBL,SLx8-Swift,CFF IN-PCIe4 3Yr Premier 24x7 4Hr Resp SR650 V3 3Yr KYD Add-On SR650 V3	2
워크노드서버	Lenovo	ThinkSystem 32GB TruDDR5 4800MHz (2Rx8) RDIMM ThinkSystem RAID 9350-8i 2GB Flash PCIe 12Gb Internal Adapter ThinkSystem 2.5" VA 960GB Read Intensive SATA 6Gb HS SSD v2 ThinkSystem 2U 8x2.5" SAS/SATA Backplane ThinkSystem Broadcom 5719 1GbE RJ45 4-port OCP Ethernet Adapter ThinkSystem Mellanox ConnectX-6 Dx 100GbE QSFP56 2-port PCIe Ethernet Adapter ThinkSystem V3 2U x16/x8/x8 PCIe Gen5 Riser 1 or 2 ThinkSystem 1100W 230V/115V Platinum Hot-Swap Gen2 Power Supply v3 ThinkSystem SR650 V3,PCIe Gen4 CBL,SLx8-Swift,CFF IN-PCIe4 3Yr Premier 24x7 4Hr Resp SR650 V3 3Yr KYD Add-On SR650 V3	2
마스터노드 서버	Lenovo	ThinkSystem 32GB TruDDR5 4800MHz (2Rx8) RDIMM ThinkSystem RAID 9350-8i 2GB Flash PCIe 12Gb Internal Adapter	

		ThinkSystem 2.5" VA 480GB Read Intensive SATA 6Gb HS SSD v2 ThinkSystem Intel E810-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter ThinkSystem V3 2U x16/x16 PCIe Gen5 Riser3 Kit ThinkSystem 1100W 230V/115V Platinum Hot-Swap Gen2 Power Supply v3 ThinkSystem SR650 V3,PCIe Gen4 CBL,SLx8-Swift,CFF IN-PCIe4 3Yr Premier 24x7 4Hr Resp SR650 V3 3Yr KYD Add-On SR650 V3	
AI 노드 서버	Lenovo	ThinkSystem 32GB TruDDR5 5600MHz (2Rx8) RDIMM ThinkSystem 2.5" U.3 7500 PRO 960GB Read Intensive NVMe PCIe 4.0 x4 HS SSD ThinkSystem Mellanox ConnectX-6 Dx 100GbE QSFP56 2-port PCIe Ethernet Adapter ThinkSystem V3 2U x16/x16 PCIe Gen5 Riser3 Kit ThinkSystem 1800W 230V Platinum Hot-Swap Gen2 Power Supply ThinkSystem 400mm 2x6+4 GPU Power Cable ThinkSystem SR650 V3 MCIO8x Cable from PCIe 1/2 (MB) to MCIO 3/4(Riser3), 850mm ThinkSystem RAID 940-8i 4GB Flash PCIe Gen4 12Gb Adapter for U.3 Placement 3Yr Premier 24x7 4Hr Resp SR650 V3 3Yr KYD Add-On SR650 V3	2