UpStation

Design **UPS-DSN-20261103-HMVH**
Prepared 2026-11-03 · prices as of 2026-11-03
Prepared for — · —

Rack elevation and power — budgetary design, not a quote

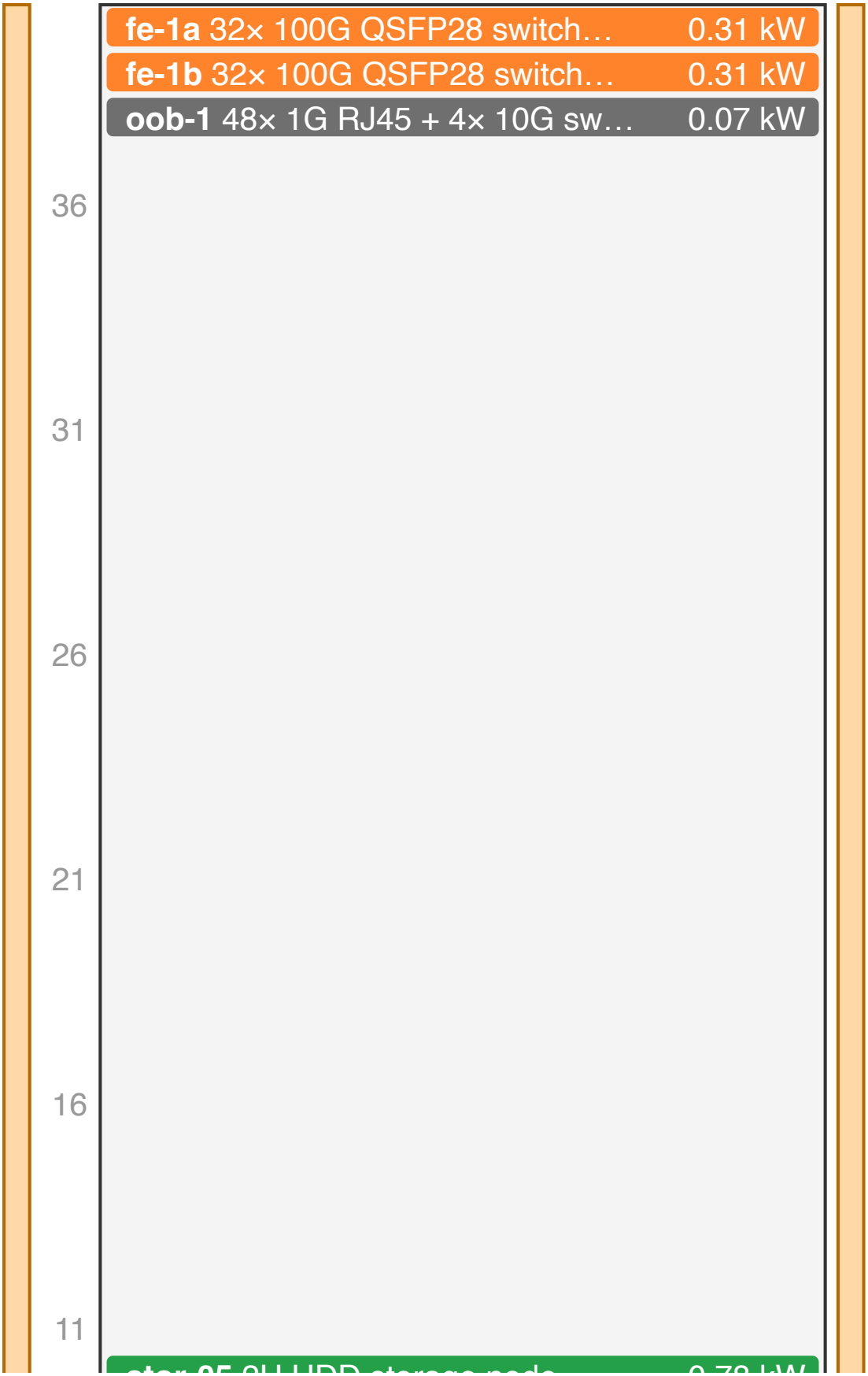
2 PB usable archive on HDD storage nodes (RAID 6), Montana colo

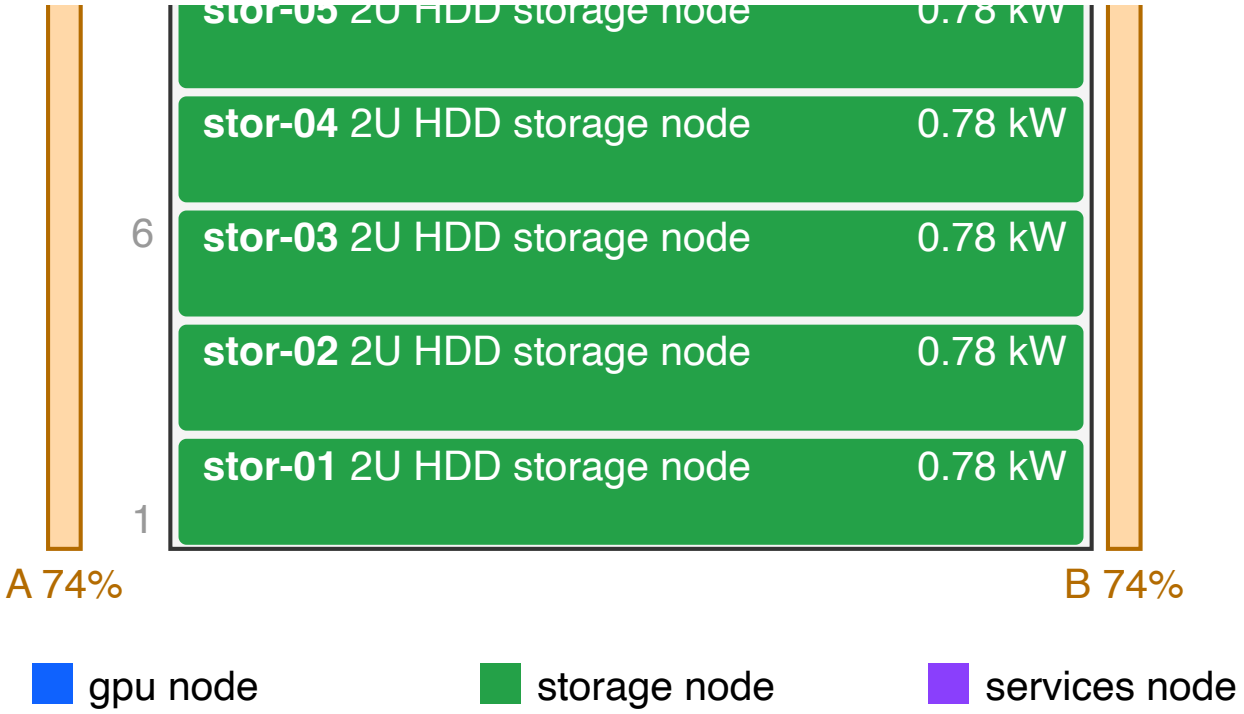
4.59 kW provisioned (nameplate ÷ 0.8) across the racks below, each held to 40 kW. Each rack takes an A and a B feed; either one alone carries the whole rack.

Rack elevation

Services 1

13/40 U · 4.59 kW · 1× 208V 1-ph 30A A+B





Power per rack

Rack	Space	Provisioned	Circuits (A+B)	Load per feed	Cords per feed
Services 1	13/40 U	4.59 kW	1× 208V 1-ph 30A	74%	8

Colocation by location

Location	$/kW/month	Per month	Term total	Sales tax	Property tax
Montana (this design)	$260	$1,193.00	$42,948.00 (36 mo)	none	none on the first $1M of equipment, about 0.8%/yr above
Texas	$225	$1,033.00	$37,188.00 (36 mo)	8.25% (6.25% state + local); the data-center exemption needs $200M and 20 jobs	about 2.2%/yr of market value
Oregon	$175	$803.00	$28,908.00 (36 mo)	none	about 1.5-2%/yr of market value (ORS 308.290); abatements closed to data-center property since 2026
Pennsylvania	$250	$1,148.00	$41,328.00 (36 mo)	6% (8% Philadelphia, 7% Allegheny), or none if the facility is state-certified and the tenant holds its own exemption certificate (100 kW+, 2-year contract) before buying	none
Canada (Ontario, Quebec)	$225	$1,033.00	$37,188.00 (36 mo)	HST 13% (Ontario) or GST+QST (Quebec) on hardware and colo, recovered as an input tax credit by a registered business	none

How it was laid out

1. Services 1: 13 U, 4.59 kW provisioned → 1 × 208V 1-ph 30A circuit pair (A+B), 74% of each feed; 8 power cords per feed.

Devices

Rack	U	Name	Device	RU	kW	PSUs
Services 1	40	fe-1a	32× 100G QSFP28 switch — front-end pair, MLAG	1	0.31	2
Services 1	39	fe-1b	32× 100G QSFP28 switch — front-end pair, MLAG	1	0.31	2
Services 1	38	oob-1	48× 1G RJ45 + 4× 10G switch — OOB	1	0.07	2

Services 1	9	stor-05	2U HDD storage node	2	0.78	2
Services 1	7	stor-04	2U HDD storage node	2	0.78	2
Services 1	5	stor-03	2U HDD storage node	2	0.78	2
Services 1	3	stor-02	2U HDD storage node	2	0.78	2
Services 1	1	stor-01	2U HDD storage node	2	0.78	2

Assumptions

- None beyond the catalog conventions.

Next step. Book the intro (https://calendly.com/alecglover/intro-call) or email alec@upstation.io with the design ID; UpStation validates the design and introduces the supplier that fits.

Prepared by UpStation from public supplier prices published at ai.upstation.io (prices as of 2026-11-03). Budgetary only: the supplier confirms price, availability and lead time on order. UpStation does not resell; buyers transact directly with the supplier. alec@upstation.io