

Japan / Site / Published revision 1

ESR Cosmosquare Data Centre Campus

25 MW • Grid connection

OS1 receiving capacity

Also known as: CloudHQ Cosmosquare • KIX Campus

Development status: operational, planned

Three-phase hyperscale campus in Osaka comprising OS1, OS2 and OS3. ESR and CloudHQ jointly develop the campus, with CloudHQ operating OS1. OS1 commenced operations in 2025. Later-phase delivery and competing campus power claims require reconciliation.

Last researched: 2026-10-09 | Last verified: Not independently verified

Tracked dataset only. Unknown values are not zero. Evidence dates and measurement definitions must be considered when comparing sites.

Site photographs



Photo: Cosmosquare OS1 exterior, as identified in NTT Facilities' completed-building portfolio; visual suitability not inspected. [11]

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Site profile

Field	Published information
Operator	ESR–CloudHQ joint venture; CloudHQ operates OS1 [2] [3]
Owner	Unknown
Business model	colocation [5] [7]
Scale	hyperscale [1] [7]
Country	Japan [1]
State / region	Osaka Prefecture [5]
Metro area	Osaka [1] [7]
City / locality	Osaka [1] [8]
Address	Nanko Kita 1-chome, Suminoe-ku, Osaka, Japan [8]
Coordinates	34.6394, 135.42107 · approximate precision. Coordinates explicitly published on CloudHQ's KIX campus page; locality corroborated by ESR and Osaka City records. Campus point and boundaries were not independently established; Google Maps was inaccessible.
Parent	Not assigned

Capacity evidence

Do not add these claims together. IT load, facility power, grid connection and unspecified power are different measurements. Cumulative and incremental scopes remain separate.

Measurement	Development scope	Evidence / accounting
130 MW Facility power	Ultimate campus OS1–OS3 planned · cumulative	[1] conflicting · 2024-08-29 Excluded from totals. As of announcement date; ultimate development capacity, not installed operating load. Later report states 162 MW facility load.
25 MW Facility power	OS1 fully fitted-out facility planned · cumulative	[1] reported · 2024-08-29 Excluded from totals. As of announcement date; explicitly facility load and conditional on fit-out. Included within campus capacity.
25 MW Grid connection	OS1 receiving capacity unknown · cumulative	[5] reported · 2024-08-30 Excluded from totals. Japanese announcement date; receiving capacity (受電容量), not proof of live IT utilisation. May describe the same underlying 25 MW provision as the facility claim.

Measurement	Development scope	Evidence / accounting
19.2 MW IT load	OS1 design IT capacity operational · cumulative	[4] reported · 2026-10-09 Excluded from totals. As of retrieval of undated facility page; operational status supported separately by s9. Does not establish occupied IT load.
120 MW IT load	Ultimate three-phase campus planned · cumulative	[3] conflicting · 2025-10-08 Excluded from totals. Announcement date; conflicts with undated CloudHQ 96.4 MW critical IT total. No phase breakdown or reconciliation supplied.
96.4 MW IT load	Ultimate KIX campus critical IT load planned · cumulative	[7] conflicting · 2026-10-09 Excluded from totals. Retrieval date of undated operator page, not publication date. Page labels both available critical load and total critical IT load 96.4 MW while retaining planned June 2025 RFS wording.
162 MW Facility power	Cosmosquare campus OS1-OS3 planned · cumulative	[9] conflicting · 2026-10-09 Excluded from totals. Retrieval date of report covering 2025 with selected extended content; exact capacity effective date unknown. Campus overview explicitly labels facility load; no explanation of increase from 130 MW.
96 MW Unspecified power	Original three-phase campus announcement planned · cumulative	[10] conflicting · 2022-11-08 Excluded from totals. Historical announcement date; power basis not explicitly stated. Supersession or redesign not reconciled; do not combine with later claims.

Development timeline

2022-11-08 · announcement · OS1 construction announced

ESR announced commencement of its first Cosmosquare data-centre phase. [10]

2024-08-28 · actual · OS1 building completed

ESR Japan reports building completion; this precedes service commencement. [5]

2025-01-16 · announcement · ESR-CloudHQ partnership announced

Joint development and operation announced for the full campus. [2]

2025-06 · planned · OS1 planned readiness

January 2025 release targeted June, versus May in the earlier release and facility page; actual service month not established. [2]

2025 · actual · OS1 operations commenced

Confirmed retrospectively in ESR's 2025/2026 sustainability report. [9]

2025-10-08 · announcement · OS1 LEED Gold announced

LEED v4 BD+C: Data Centres Gold certification announced. [3]

Disclosed specifications

Campus gross floor area: 125,000 sqm

CloudHQ campus marketing figure; completed versus ultimate area not explained. [7]

OS1 site and floor areas — architect: 8,068.12 sqm site; 24,507.32 sqm gross floor area

Completed-building portfolio; differs from ESR Japan and municipal figures. [6]

OS1 site and floor areas — developer: 8,146 sqm site; 23,922 sqm floor area

August 2024 disclosure; measurement boundaries not reconciled. [5]

OS1 municipal floor area: 24,495.77 sqm

Environmental-plan disclosure; differs from architect and developer figures. [8]

OS1 data halls and racks: 8 halls; 5,950 sqm; planned 2,688 racks

336 racks per hall; actual installed count and density unknown. [5]

OS1 structure: Five storeys; steel structure; foundation seismic isolation

Building-specific, not campus-wide. [6]

OS1 cooling: Water-cooled chillers and cooling-tower free cooling

Architect describes energy-efficient equipment; no quantified liquid-cooling deployment disclosed. [6]

OS1 PUE claim: Annual average PUE 1.3 or below

Pre-operation developer statement; no measured operational series supplied. [5]

OS1 certification: LEED v4 BD+C: Data Centres Gold

Award announced October 2025; supersedes older targeting wording. [3]

Connectivity: Within 10 km of central Osaka internet and telecom exchanges

Campus marketing claim; carriers, fibre routes and latency measurements undisclosed. [7]

OS1 municipal environmental rating: B+

Osaka building environmental-plan assessment, distinct from LEED. [8]

Research gaps

- Legal property-owning entities and current equity shares
- Current OS2/OS3 construction and service dates
- Campus boundaries and precise building-marker positions
- Reconciliation of 162/130 MW facility and 120/96.4 MW IT campus claims
- Actual energised capacity and tenant occupancy
- Google Maps listing, place ID, photos and Street View
- Current measured PUE, renewable-energy share, rack densities and named tenants

Sources and field evidence

Attribution does not establish independent verification or permission to reuse images. URLs refer to public evidence.

[1] ESR completes phase 1 of its US\$2 billion, 130 MW Cosmosquare Data Centre campus in Central Osaka, Japan

<https://www.esr.com/news/esr-completes-phase-1-of-its-us2-billion-130-mw-cosmosquare-data-centre-campus-in-central-osaka-japan/>

Published: 2024-08-29 · Retrieved: 2026-10-09

OS1 core and shell completed in Nanko Kita; three phases OS1-OS3; 130 MW campus and 25 MW OS1 explicitly identified as facility load.

[2] CloudHQ and ESR announce joint venture to co-develop and operate Cosmosquare campus

<https://www.esr.com/news/cloudhq-and-esr-announce-joint-venture-to-co-develop-and-operate-us2-billion-130-mw-cosmosquare-data-centre-campus-in-japan/>

Published: 2025-01-16 · Retrieved: 2026-10-09

Partners will build, fit out and operate the three-phase campus; OS1 service targeted for June 2025.

[3] CloudHQ and ESR Achieve LEED Gold Certification for Cosmosquare OS1 Data Centre in Japan

<https://www.esr.com/news/cloudhq-and-esr-achieve-leed-gold-certification-for-cosmosquare-os1-data-centre-in-japan/>

Published: 2025-10-08 · Retrieved: 2026-10-09

OS1 operated by CloudHQ and awarded LEED v4 BD+C Gold; Suminoe-ku campus stated to deliver 120 MW IT load.

[4] Cutting-Edge Data Centre Properties by ESR

<https://www.esr.com/our-properties/data-centres/>

Published: Unknown · Retrieved: 2026-10-09

OS1 listed with 19.2 MW IT load; page still carries May 2025 readiness and certification-target wording.

[5] ESR初のデータセンター「ESRコスモスクエア データセンターOS1」竣工

<https://prtimes.jp/main/html/rd/p/000000037.000077840.html>

Published: 2024-08-30 · Retrieved: 2026-10-09

ESR Japan announcement: building completed 28 August; Osaka Prefecture location; 25 MW receiving capacity; eight halls and planned 2,688 racks; detailed address and tenants withheld.

[6] ESR コスモスクエア データセンター OS1 — NTT Facilities architectural portfolio

<https://waf.ntt-f.co.jp/architect/building/esr-cosmosquare-os1.html>

Published: Unknown · Retrieved: 2026-10-09

Architect describes completed five-storey, base-isolated OS1, exterior images, water-cooled chillers and cooling-tower free cooling.

[7] KIX Campus — CloudHQ

<https://cloudhq.com/fr/campus/kix-campus/>

Published: Unknown · Retrieved: 2026-10-09

Operator identifies Cosmosquare/KIX campus, explicit coordinates 34.63940,135.42107, 96.4 MW critical IT load, 125,000 sqm and phases KIX1-KIX3.

[8] Osaka City environmental plan: provisional ESR Nanko Data Centre

<https://www.city.osaka.lg.jp/toshikeikaku/cmsfiles/contents/0000665/665535/R04-035h.pdf>

Published: Unknown · Retrieved: 2026-10-09

Municipal disclosure identifies computer-room building at Suminoe-ku Nanko Kita 1-chome; five floors, August 2024 completion and B+ environmental assessment.

[9] ESR Data Centre Sustainability Report 2025/2026

https://esrassets.s3.ap-southeast-1.amazonaws.com/wp-content/uploads/2026/07/02204844/26_0008_ESR-Data-Centres-SR-2025-V6.pdf

Published: Unknown · Retrieved: 2026-10-09

Report covers calendar 2025, with selected extended content and no external assurance. Confirms OS1 operations commenced in 2025 and lists Cosmosquare OS1-OS3 at 162 MW facility load.

[10] ESR breaks ground on first phase of multi-phase data centre campus in Central Osaka

https://esrassets.s3.ap-southeast-1.amazonaws.com/esr_dev/uploads/2022/12/05071149/Press-release__ESR-breaks-ground-on-first-phase-of-ESR-Cosmosquare-Campus-Final-8-Nov-1.pdf

Published: 2022-11-08 · Retrieved: 2026-10-09

Groundbreaking announcement described 96 MW campus and 19.2 MW OS1, without explicit power basis in the quoted capacity statements.

[11] Property photo · waf.ntt-f.co.jp

<https://waf.ntt-f.co.jp/architect/building/esr-cosmosquare-os1.html>

Published: Unknown · Retrieved: 2026-10-09

Cosmosquare OS1 exterior, as identified in NTT Facilities' completed-building portfolio; visual suitability not inspected. Original image: <https://waf.ntt-f.co.jp/architect/shared/esr-cosmosquare-os1/d-01.jpg>

- Name: [1] [2]
- Aliases: [7]
- Kind: [1]
- Country: [1]
- Region: [5]
- City: [1] [8]
- Metro: [1] [7]
- Address: [8]
- Operator: [2] [3]
- Business Model: [5] [7]
- Scale: [1] [7]
- Statuses: [9] [7]
- Summary: [1] [2] [3] [9]
- Location: [7] [8]

Media: [11]

Stable identifier: bcf9e895-4b1e-4f17-9eb4-4fea4a2d4c4b