

	OCP Ready v2 for Hyperscale Data Center Site Assessment	SIN02		
	Self Assessment Status:	COMPLETE-MEETS REQUIREMENTS		
	Data Center Location Name	SIN02 - SINES Campus		
	Data Center Location Address			
	Site Development Category:	1. Multi-tenant Build in Progress - (estimated live services by XX/XX/XXXX)	2027	
	Site Description: IT Technical Space (White Space) Area	9000 m2 white space area		
	Site Description: Critical IT Power	180 MW IT Power. Three 60 MW data halls.		
	Site Description: Network Provider Availability	Carrier Neutral.		
	Site Description: Facility Features	Office space, storage, 24x7 security and Ops on site		
	Site Description: Other Services			
	Date Original Assessment is Completed	01/01/2024		
	Re-Assessment Date:	05/28/2025		
Ref:	REQUIREMENTS - Attribute (Must have an Optimum or Acceptable result)	Parameter	Result	Notes
1	CAMPUS SITE ACCESS & LOGISTICS			
1.0	SITE ACCESS			
1.0-A	Vehicular Access inc. truck circulation	1. Roadway access to loading dock to allow for an Interstate Semitrailer 65' Wheelbase (WB-65)	Optimum	
1.0-B	Building Access	1. Covered loading dock with leveler	Optimum	Dock seals provided at docks with 1200 mm inside/outside height difference and levelers. Total = 3
1.0-C	Delivery pathway, Loading dock to storage room	1. ≥ 2.75m (108in) H x ≥ 1.6m (63in) W unobstructed access and threshold free	Optimum	
1.0-D	Delivery pathway, Goods in to IT Technical Space	1. ≥ 2.75m (108in) H x ≥ 1.6m (63in) W unobstructed access and threshold free	Optimum	
1.0-E	Corridor floor rolling load	1. ≥680 kg (1500 lb/ft2) (6.67 kN) slab on grade	Optimum	
1.0-F	Unboxing/pre-staging/storage area floor uniform load	1. ≥1221 kg/m2 (250 lb/ft2) (11.97 kN/m2) slab on grade	Optimum	
1.0-G	Unboxing/pre-staging/storage area floor concentrated load	1. ≥680 kg (1500 lb/ft2) (6.67 kN) slab on grade	Optimum	
1.1	ACCESS CONTROLS & MONITORING			
1.1-A	Site perimeter fence	1. ≥2.43m (96in) H with perimeter intrusion detection system (PIDS)	Optimum	
1.1-B	Site security lighting	1. Site lighting with backup power	Optimum	
1.1-C	Main Security Checkpoint (or check in location)	1. Staffed 24/7	Optimum	
1.1-D	Levels of security to gain access to IT Technical Space	1. >3 (site perimeter, building perimeter, secure corridor and IT Technical Space)	Optimum	
1.1-E	Video surveillance data record archive	1. >30 days	Optimum	
1.1-F	Visitor access requirements	1. Pre-approved with valid government issued ID and escorted	Optimum	
1.1-G	Entrance and exit door monitoring	1. All entrance and exit doors are electronically monitored and recorded	Optimum	
1.2	RAMPS			
1.2-A	Gradient	1. Not Applicable - No Ramps Required	Optimum	Ramps not required to serve tenant occupied spaces
1.2-B	Length	1. Not Applicable - No Ramps Required	Optimum	Ramps not required to serve tenant occupied spaces
1.2-C	Width	1. Not Applicable - No Ramps Required	Optimum	Ramps not required to serve tenant occupied spaces
1.2-D	Landing area	1. Not Applicable - No Ramps Required	Optimum	Ramps not required to serve tenant occupied spaces
1.2-E	Railings	1. Not Applicable - No Railings Required	Optimum	Ramps not required to serve tenant occupied spaces
1.3	FREIGHT LIFTS / ELEVATORS			
1.3-A	Weight loading	1. Not Applicable - No Lift/Elevator Required	Optimum	Material Lift not required to serve tenant occupied spaces
1.3-B	Door height	1. Not Applicable - No Lift/Elevator Required	Optimum	Material Lift not required to serve tenant occupied spaces
1.3-C	Width	1. Not Applicable - No Lift/Elevator Required	Optimum	Material Lift not required to serve tenant occupied spaces
1.3-D	Depth	1. Not Applicable - No Lift/Elevator Required	Optimum	Material Lift not required to serve tenant occupied spaces
2	IT TECHNICAL SPACE (WHITE SPACE)			
2.0	STRUCTURAL			
2.0-A	Floor rolling load	1. ≥680kg (1500lb) (6.67kN) slab on grade	Optimum	
2.0-B	Floor uniform load	1. ≥1221 kg/m2 (250 lb/ft2) (11.97 kN/m2) slab on grade	Optimum	Floor uniform load is 1700 kg/m2 17 kN/m2 slab on grade.
2.0-C	Floor concentrated load	1. ≥680kg (1500lb) (6.67kN) slab on grade	Optimum	Floor concentrated load is 1500 kg/m2 15kN/m2 slab on grade.
2.0-D	Finished floor to ceiling height	1. ≥4.5m (178in) clear space (no obstructions)	Optimum	Varies with location. For Data Halls, floor to ceiling is 6.5 mts.
2.0-E	Access floor	1. Not Applicable - No Access floor	Optimum	
2.1	ELECTRICAL			
2.1-A	Class Rating	1. 3 (e.g. Bicsi F3 or UTI Tier 3 Notes Required)	Optimum	System is designed following to Tier 3 requirements.

2.1-B	Row level diverse power feeds	1. 2N (A+B)	Optimum	4n3
2.1-C	Nominal circuit capacity	1. 1 ϕ and 3 ϕ circuits available based on customer requirements (e.g. 1 ϕ 230-240V, 3 ϕ 400V-415V Notes Required)	Optimum	We can provide 1 ϕ 16A/230V. Our power distribution is extremely flexible. In our experience, current power requirements are going up, with 3 ϕ 100A 400V R-PDUs as the new trend for high density, and 3 ϕ 32A 400V R-PDUs for racks up to 20 kW.
2.1-D	Circuit frequency	1. 47-63 Hz	Optimum	
2.1-E	Power receptacle / WIP Type	1. All power receptacle types supported	Optimum	Power Circuits rated for high capacity computing. End distribution is flexible, with busbars and multiple TOU options based on end customer load.
2.1-F	Circuit receptacle location	1. Overhead busbar	Optimum	
2.1-G	Upstream UPS options	1. N+N UPS feed	Optimum	Upstream distributed redundant UPS
2.1-H	Rack-based batteries permitted	1. Allowed	Optimum	Subject to local code restrictions
2.1-I	Generator load acceptance time	1. <20 seconds	Optimum	
2.2	COOLING			
2.2-A	Class Rating	1. 3 (e.g. Bicsi F3 or UTI Tier 3 Notes Required)	Optimum	System is designed following to Tier 3 requirements.
2.2-B	Supplemental Advanced Cooling	1. Not Applicable	Optimum	
2.2-C	Rack airflow direction	1. Front to Back	Optimum	
2.2-D	Air containment methods	1. Hot aisle containment	Optimum	
2.2-E	Maximum rack density	1. ≥ 12 kW	Optimum	
2.2-F	Minimum cold aisle width	1. ≥ 1400 mm (56in)	Optimum	
2.2-G	Minimum free width cold aisle (Inside cage)	1. ≥ 1400 mm (56in)	Optimum	not caged, but greater than 1400mm cold aisles throughout.
2.2-H	Minimum hot aisle width	1. ≥ 1200 mm (48in)	Optimum	
2.2-I	Inlet air conditions	1. ASHRAE Recommended	Optimum	
2.2-J	Air quality	1. MERV 8 filters on outside air	Optimum	
2.2-K	Temperature rise	1. ≥ 12 Deg C DeltaT	Optimum	
2.2-L	Cabinet blanking of open space	1. Mandatory	Optimum	
3	TELECOMMUNICATIONS			
3.1	ACCESS PROVIDERS AND OUTSIDE PLANT (OSP) Fiber			
3.1-A	OSP fiber to data center campus	1. 3 diverse OSP entrances to the data center campus	Optimum	
3.1-B	Carriers and backbone providers	1. Carrier neutral with expansion capability (Notes Required)	Optimum	
3.2	MEET-ME ROOMS (MMRs)			
3.2-A	Number and Location	1. N+N Isolated MMRs with dedicated OSP fiber entrance from service providers	Optimum	
3.3	MMR CABLING			
3.3-A	MMR to IT Technical Space Pathways	1. 2 dedicated diverse pathways from 2 MMRs	Optimum	
3.3-B	MMR to IT Technical Space Conduit Pathway sizing	1. ≥ 100 mm (4in) conduit pathways	Optimum	
3.4	MMR ELECTRICAL			
3.4-A	Class Rating	1. 3 (e.g. Bicsi F3 or UTI Tier 3 Notes Required)	Optimum	System is designed following to Tier 3 requirements.
3.4-B	Row level diverse power feeds	1. 2N (A+B)	Optimum	
3.4-C	Nominal circuit capacity	1. 1 ϕ and 3 ϕ circuits available based on customer requirements (e.g. 1 ϕ 230-240V, 3 ϕ 400V-415V Notes Required)	Optimum	1 ϕ 16A/230V & 3 ϕ 32A 400V
3.4-D	Circuit frequency	1. 47-63 Hz	Optimum	
3.4-E	Upstream UPS options	1. UPS systems derived from an isolated house lineup	Optimum	
3.4-F	UPS Redundancy	1. N+1	Optimum	
3.4-G	Generator load acceptance time	1. <20 seconds	Optimum	
3.5	MMR COOLING			
3.5-A	MMR cooling redundancy per room	2. N+1	Acceptable	
3.5-B	MMR cooling system type	2. Chilled water	Acceptable	
3.5-C	MMR cooling isolation	1. Isolated from IT technical space cooling system	Optimum	
3.6	MMR ACCESS CONTROLS			
3.6-A	Customer access to MMR(s)	1. Controlled by the colocation data center and escorted	Optimum	
3.6-B	Service Provider access to MMR(s)	1. Controlled by the colocation data center and escorted	Optimum	
3.6-C	Biometric readers, badge readers, and video surveillance installed for the MMR(s)?	1. Yes	Optimum	
4	SERVICE			

4.1	OPERATIONS AND SPARE PARTS			
4.1-A	Critical spares program	1. On hand spares available on campus	Optimum	
4.1-B	Critical Response SLA	1. Yes	Optimum	
4.1-C	Remote hands program	1. Yes	Optimum	
4.1-D	Office Space	1. Dedicated space available for fitout	Optimum	
5	EFFICIENCY			
5.0-A	Site Operations Standards	1. Other (Notes required)	Optimum	BICSI standard is followed as a guideline. We implement industry best practices, equipment manufacturers recommendations and customer specific requirements.
5.0-B	Operational Sourcing Standard	1. Hybrid	Optimum	
5.0-C	Work Note Communication and Coordination	1. Yes (e.g. Dedicated portal, Teams, Sharepoint)	Optimum	All O&M activities are recorded in Planon software.
5.0-D	Site PUE Monitoring	1. Continuously monitored	Optimum	
5.0-E	Site Design PUE at Full Load	1. <1.3 @ 80% Max Utilization	Optimum	
5.0-F	Site Annualized PUE Current Achievement	1. Data Center in operation for <1 year	Optimum	
5.0-G	Site WUE Monitoring	1. Not applicable (e.g. zero water requirement)	Optimum	
5.0-H	Site CUE Monitoring	1. Continuously monitored	Optimum	
6	OPENNESS			
6.0-A	PUE Published	1. Real-time available online	Optimum	Available for our customers through client portal
6.0-B	Facility Design Drawings & Files	1. Available to view upon request	Optimum	NDA is required.
6.0-C	BMS / PMS Customer Access	1. External access provided through a MQTT Broker or other air gapped connection for telemetry purposes. (e.g. power monitoring)	Optimum	Energy consumption, temperature, humidity and PUE available for our customers through client portal
7	CERTIFICATIONS			
7.0-A	ISO/IEC 27001	1. Certification in process	Optimum	
7.0-B	SOC 1 Type II	1. Certification available on request	Optimum	If a customer requires it, we will accelerate the certification process.
7.0-C	SOC 2 Type II	1. Certification available on request	Optimum	If a customer requires it, we will accelerate the certification process.
7.0-D	PCI-DSS	1. Certification available on request	Optimum	If a customer requires it, we will accelerate the certification process.
7.0-E	Sustainability Assessment	1. LEED Certification in process	Optimum	Building Design in accordance to LEED Platinum v4.
7.0-F	Data Center Certification	2. Other (Notes Required)	Acceptable	System is designed following to Tier 3 requirements.
	Site Assessment Version - v1.0 rev1.10			