	OCP Ready v2 for Hyperscale Data Center Site Assessment	JH1 (DC4)		
	Self Assessment Status:	COMPLETE-MEETS REQUIREMENTS		
	Data Center Location Name	JH1, Johor Malaysia		
	Data Center Location Address	Sedenak Tech Park, Kulai, Johor, Malaysia		
	Site Development Category:	1. Multi-tenant Capacity Available	31/12/2025	
	Site Description: IT Technical Space (White Space) Area	347-350m2		
	Site Description: Critical IT Power	15.3MW		
	Site Description: Network Provider Availability	Carrier Neutral and Available		
	Site Description: Facility Features	Hyperscale and AI Ready DC Space		
	Site Description: Other Services			
	Date Original Assessment is Completed	07/10/2024		
	Re-Assessment Date:			
Ref:	**REQUIREMENTS - Attribute (Must have an Optimum or Acceptable result)**	**Parameter**	**Result**	**Notes/ Actual Parameters**
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 a trailer 12.2m (40') Wheelbase	**Optimum**	
1.0-B	Building Access	1. Covered loading dock with leveler	**Optimum**	
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	2. ≥680 kg (1500 lb) (6.67 kN) access floor (no spreader plates required)	**Acceptable**	
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**	
1.2-B	Length	1. Not Applicable - No Ramps Required	**Optimum**	
1.2-C	Width	1. Not Applicable - No Ramps Required	**Optimum**	
1.2-D	Landing area	1. Not Applicable - No Ramps Required	**Optimum**	
1.2-E	Railings	1. Not Applicable - No Railings Required	**Optimum**	
1.3	**FREIGHT LIFTS / ELEVATORS**			
1.3-A	Weight loading	1. ≥3000kg (6600lbs)	**Optimum**	
1.3-B	Door height	1. ≥2.75m (108in) Lift /Elevator door opening height (internal cabin)	**Optimum**	
1.3-C	Width	1. ≥1.8m (71in) Unobstructed door opening width	**Optimum**	
1.3-D	Depth	2. ≥1.5m (60in) Unobstructed cabin depth	**Acceptable**	
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**	
2.0-C	Floor concentrated load	1. ≥680kg (1500lb) (6.67kN) slab on grade	**Optimum**	
2.0-D	Finished floor to ceiling height	2. ≥3.65m (144in) clear space (no obstructions)	**Acceptable**	
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**	Redundant UPS with batteries, Generators and Power Distribution units with 2 source power supplies within IT space

2.1-B	Row level diverse power feeds	1. 2N (A+B)	Optimum	
2.1-C	Nominal circuit capacity	1. 1ϕ 16A/230V	Optimum	3Phase 32A/400V also available
2.1-D	Circuit voltage	1. 400/230 VAC nominal	Optimum	
2.1-E	Circuit frequency	1. 47-63 Hz	Optimum	
2.1-F	Power receptacle / WIP Type	1. All power receptacle types supported	Optimum	
2.1-G	Circuit receptacle location	1. All circuit receptacle locations supported	Optimum	
2.1-H	Upstream UPS options	1. N+N UPS feed	Optimum	Distribution redundant 4M3 also available
2.1-I	Rack-based batteries permitted	1. Allowed	Optimum	
2.1-J	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	UTI Tier 3 equivalent with Mechanical concurrent maintainable
2.2-B	Rack airflow direction	1. Front to Back	Optimum	
2.2-C	Air containment methods	1. Hot aisle containment	Optimum	
2.2-D	Maximum rack density	1. ≥12kW	Optimum	
2.2-E	Minimum cold aisle width	1. ≥1400mm (56in)	Optimum	
2.2-F	Minimum free width cold aisle (Inside cage)	1.≥1400mm (56in)	Optimum	
2.2-G	Minimum hot aisle width	1. ≥1200mm (48in)	Optimum	
2.2-H	Inlet air conditions	1. ASHRAE Recommended	Optimum	
2.2-I	Air quality	1. MERV 8 filters on outside air	Optimum	
2.2-J	Temperature rise	1. ≥12 Deg C DeltaT	Optimum	
2.2-K	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	2. Carrier neutral	Acceptable	
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. ≥100mm (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	Redundant UPS with batteries, Generators and Power Distribution units with 2 source power supplies within IT space
3.4-B	Row level diverse power feeds	1. 2N (A+B)	Optimum	
3.4-C	Nominal circuit capacity	1. 1ϕ 16A/230V	Optimum	3Phase 32A/400V also available
3.4-D	Circuit voltage	1. 400/230VAC Nominal	Optimum	
3.4-E	Circuit frequency	1. 47-63 Hz	Optimum	
3.4-F	Upstream UPS options	1. N+1 UPS systems derived from an isolated house lineup	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	1. DX	Optimum	
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**	TIMS Level 4
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**	
5.0-D	Site PUE Monitoring	1. Continuously monitored	**Optimum**	
5.0-E	Site Design PUE at Full Load	2. >1.3 @ 80% Max Utilization (e.g. due to location in Ashrae Climate zone OA, notes required for PUE calculation)	**Acceptable**	PDG JH1 site is located at Johor, N=20 years ambient temperature is 36.5°C and the cooling design with Water cooled. Thus, the annualized design PUE is >1. 30
5.0-F	Site Annualized PUE Current Achievement	1. Data Center in operation for <1 year	**Optimum**	
5.0-G	Site WUE Monitoring	1. Continuously monitored	**Optimum**	
5.0-H	Site CUE Monitoring	1. Continuously monitored	**Optimum**	
6	**OPENNESS**			
6.0-A	PUE Published	1. Real-time available online	**Optimum**	
6.0-B	Facility Design Drawings & Files	1. Available to view upon request	**Optimum**	
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**	
7	**CERTIFICATIONS**			
7.0-A	ISO/IEC 27001	1. Certification available on request	**Optimum**	
7.0-B	SOC 1 Type II	1. Certification available on request	**Optimum**	
7.0-C	SOC 2 Type II	1. Certification available on request	**Optimum**	
7.0-D	PCI-DSS	1. Certification available on request	**Optimum**	
7.0-E	Sustainability Assessment	2. Other Regional Equivalent (Notes Required)	**Acceptable**	Local Malaysia Standard GBI in process
7.0-F	Data Center Certification	2. Other Regional Equivalent (Notes Required)	**Acceptable**	Local Malaysia Standard GBI in process