

Welcome to  
Singapore Woodlands

GLOBAL  
SWITCH



Artist impression





Artist impression

# PLUG IN TO OUR SECOND SINGAPORE DATA CENTRE

Global Switch Singapore Woodlands will provide 25,000 sq m of world-class critical infrastructure, supported by 30MVA of utility power supply capacity.

Singapore is a thriving global commerce, finance and transport hub, described as one of Asia's economic 'tigers'. Importantly, the country prides itself on stability and security. Located at the heart of Southeast Asia, Singapore is well placed to serve the fast-growing markets of the Asia-Pacific region and has grown to be a strategic link and important gateway for global investors.

As with all Global Switch data centres, Singapore Woodlands will deliver a highly resilient environment providing scalable and flexible solutions supported by numerous connectivity options. It is also designed to meet our best-in-class operational and environmental management processes and will operate to Tier III plus standards.

The data centre will benefit from diverse power from two separate incoming supplies, offering high density solutions as standard and with flexibility to meet a range of requirements.



A WORLD-CLASS  
DATA CENTRE



OPERATIONAL  
EXCELLENCE



NETWORK  
DENSE



CLOUD  
CONNECTIVITY



CARRIER  
NEUTRAL



BESPOKE  
SOLUTIONS



# JOIN OUR GLOBAL NETWORK

We are a leading large-scale, carrier and cloud neutral, multi customer data centre owner and operator across Asia-Pacific and Europe.

Established in 1998, we offer a tailor-made service across our network of hyperscale carrier and cloud neutral data centres. All of our sites deliver secure and resilient solutions with scalable capacity, are strategically located in key international business and connectivity hubs, and operate to Tier III plus standards.



01



02



03



04



05



06



07



08



09

## GLOBAL SWITCH AT A GLANCE

- A strong network of world-class data centres
- Low latency locations in Tier 1 markets close to business, communications and internet hubs
- Rich ecosystem with some of the world's leading connectivity and cloud service providers alongside global system integrators and financial services solution specialists
- Economies of scale provide substantial energy efficiencies which result in reduced total occupancy costs
- Unrivalled power with multiple layers of redundancy
- State of the art security and monitoring systems in place 24x7x365
- Industry-leading reliability with comprehensive Critical Environments Programme
- Investment grade credit ratings received from Fitch, Moody's and Standard & Poor's
- Strong management team with significant industry experience

- 01 SINGAPORE TAI SENG
- 02 HONG KONG
- 03 SYDNEY EAST
- 04 SYDNEY WEST
- 05 AMSTERDAM
- 06 FRANKFURT
- 07 LONDON CAMPUS
- 08 PARIS CAMPUS
- 09 MADRID





# AT THE HEART OF ASIA-PACIFIC

Located to the north of the Island and physically distanced from Global Switch Singapore Tai Seng and other data centres, Singapore Woodlands will allow our customers to establish or increase their regional presence in this rapidly growing and connected location.

Global Switch owns and operates data centres in many of the world's strategic communication and financial hubs.

Singapore is one of the most important centres in the Asia-Pacific region and a hub of numerous companies and financial institutions. With a highly developed transport network, Singapore's airport is an award winning logistics gateway as well as being one of the largest transportation hubs in Southeast Asia. It is also one of the world's busiest airports in terms of international passenger and cargo movement.

Singapore Woodlands will be strategically located 17km from the Central Business District and 15km from Global Switch Singapore Tai Seng.



## KEY LOCATION FEATURES

- Multiple connectivity options to connect with Global Switch Singapore Tai Seng, widely regarded as one of the most important hubs in the region
- Physically distanced from the two main existing data centre concentrations in the east and west
- A MRT station is located within a 10 minute walk and bus access is readily available
- Low latency
- Changi Airport is 23km away



# YOUR FUTURE-PROOFED DATA CENTRE

Global Switch Singapore Woodlands is centred around state of the art design, from its striking yet welcoming reception, through to the fully equipped technical areas. As with all our data centres, the experience will simply be 'world-class'.

As a data centre owner and operator, our relationship with our customers is at the centre of our business model. We are committed to building advanced facilities in order to respond to our customers' ever-changing needs.

We also value the importance of sustainability. Our operational environment enables customers to reduce their carbon footprint and drive greater efficiency from their operations. This reduces total cost of occupancy and minimises operational risk which is why some of the world's largest companies and organisations have chosen Global Switch to house their mission-critical IT infrastructure.

As a company we are committed to ISO 9001, ISO 14001, ISO 27001, ISO 45001 and ISO 50001 standards.

Singapore Woodlands will be a leading example of an environmentally sustainable data centre and is targeting a Leadership in Energy and Environmental Design (LEED) Gold Rating and a Platinum BCA Green Mark.

The data centre will offer:

- Reconfigurable and highly efficient power and cooling distribution
- Variable speed fans
- High energy efficient CRAH units



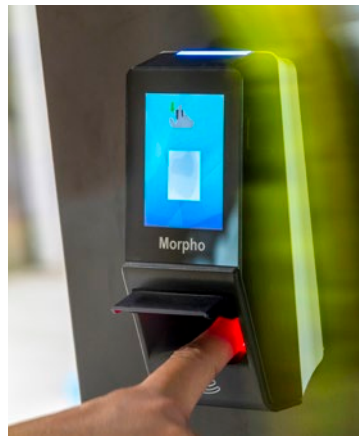
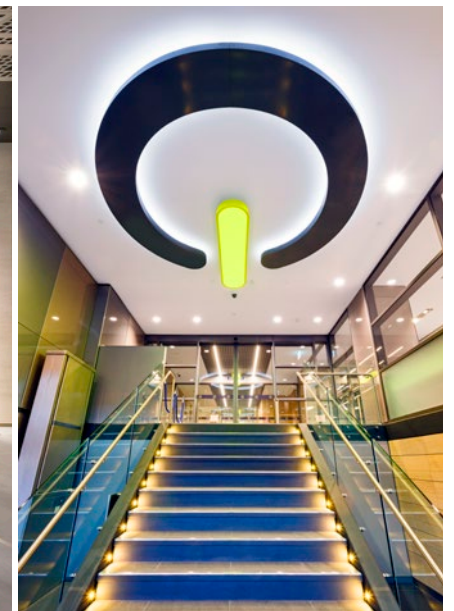
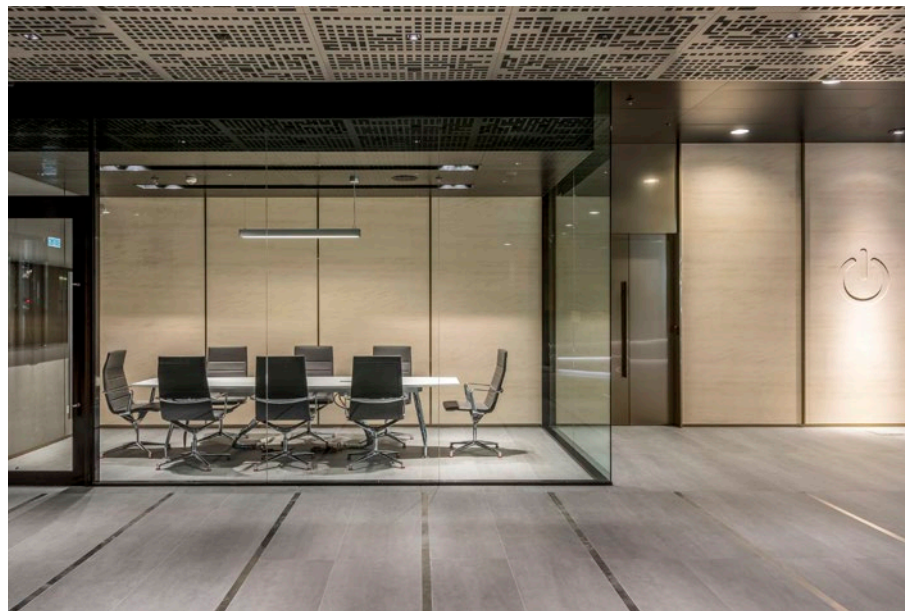
OPTIMISED  
COOLING



HIGHLY  
SECURE



SUSTAINABLE  
SOLUTIONS



Images from existing  
Global Switch data centres

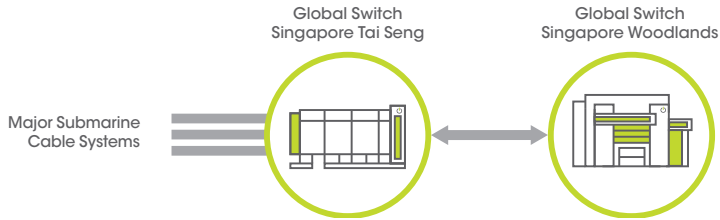
## KEY FEATURES

- 25,000 sq m of world-class infrastructure
- 30MVA utility power supply
- High density as standard with flexibility to meet a range of requirements
- Scalable approach: design can be tailored to suit customer needs
- Design PUE of 1.34
- BCA Greenmark Platinum and LEED Gold certification
- Carrier neutral with access to multiple Tier 1 and Tier 2 international carrier networks
- Highly secured, TVRA compliant facility that exceeds security requirements of local and international regulators, built with dedicated security infrastructure systems, HD video surveillance system and biometric entry controls
- Low risk operational environment
- Cost effective solutions

# INTERCONNECTING ECOSYSTEMS

Global Switch Singapore Woodlands will provide multiple connectivity options to connect with the dense ecosystem already operating from within Global Switch's Singapore Tai Seng data centre, which is recognised as being one of the most important communications hubs in the Asia-Pacific region.

Global Switch Singapore Woodlands will offer direct connections to Global Switch Singapore Tai Seng which hosts the network PoPs of all the major international telecommunications companies, and uniquely, a number of major submarine cable systems already land directly in the facility. Virtually all the leading internet services companies have a presence including ISPs, major content owners and distributors, web portals and online social media. Together with the presence of the Singapore Internet Exchange (SGIX), these organisations transform the Global Switch data centre in Tai Seng into a convergent connectivity hub, reaching out to all parts of the globe.



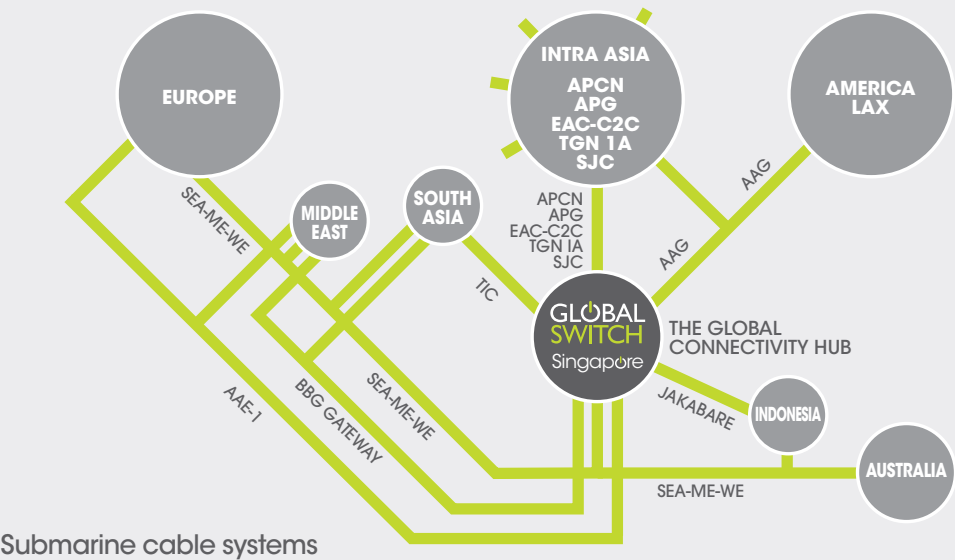
Global Switch data centres are located in key connectivity hubs across Asia-Pacific and Europe, in close proximity to international fibre routes. Accessing the area's rich connectivity as well as our multiple ISPs and international and local Tier 1 and Tier 2 carriers is essential to business continuity and increasing network reach.

At Global Switch data centres, you are able to establish direct connections to a vast portfolio of service providers, giving you the flexibility to diversify your network and connect your data centres as your business needs evolve.

Global Switch Singapore Woodlands will offer four diverse entry points as well as two dedicated Meet Me Rooms. You will also be able to connect to Asia-Pacific and the rest of the world through the submarine cable networks landing in Global Switch Singapore Tai Seng and others in the area.

## KEY BENEFITS

- Direct connections to Global Switch Singapore Tai Seng
- Rich connectivity with a multitude of nearby cable landing stations
- Two Meet Me Rooms provide diversity and connection options
- Location allows low latency connectivity
- Diverse cable routes and pathways
- Roof space availability to satellite and antenna equipment



## Cable System

- AAE-1: Asia to Africa to Europe 1 Cable
- AAG: Asia America Gateway
- APCN: Asia-Pacific Cable Network
- APG: Asia-Pacific Gateway
- BBG GATEWAY: Bay of Bengal Gateway
- EAC-C2C: East Asia Crossing
- JAKABARE: Singapore to Indonesia Cable
- Matrix Network: Singapore to Indonesia Cable
- SEA-ME-WE: South East Asia, Middle East & Western Europe Cable
- SJC: South-East Asia Japan Cable
- TGN 1A: Tata Intra Asia
- TIC: Tata Indicom Cable



CARRIER NEUTRAL



NETWORK DENSE



MULTIPLE PEERING



LOW LATENCY





Images from existing Global Switch data centres

# SETTING NEW STANDARDS IN SOLUTIONS

Being able to offer robust and scalable solutions in terms of power and cooling has been the driver for many of the leading businesses that choose Global Switch as their Asia-Pacific and European data centre provider.

We have worked with some of the world's largest companies to deliver data centre solutions to match their specific requirements for the short, medium and long term challenges they may face. Our unrivalled experience and expertise give our customers the confidence that we will deliver from initial consultation, through build and fit out phases, to continued technical support.

Global Switch operates a centrally-run, industry-leading Critical Environments Programme across all of our global data centres, with dedicated teams in each location. These teams drive a common set of best practice standards, systems, processes and procedures.

These international teams share their knowledge to keep Global Switch at the forefront of data centre management and service provision, giving a consistent experience across the group.

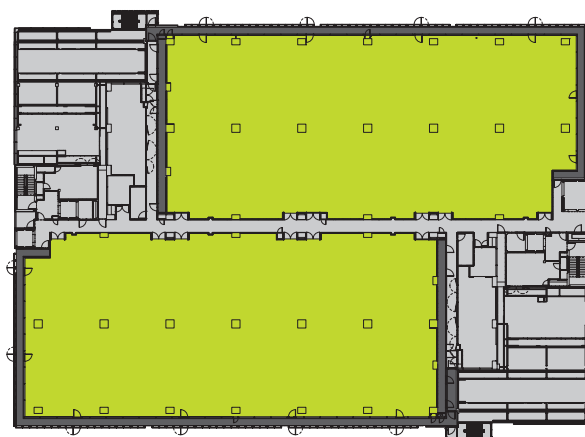
Our team has unrivalled expertise in all facets of the operational environment. We have sourced only the most talented and experienced experts and suppliers who have designed, built and will maintain our Singapore Woodlands data centre.



Artist impression

# WHERE SCALE AND FLEXIBILITY MEET RESILIENCY

Global Switch puts the needs of our customers at the centre of our operations. Understanding our customers' requirements and challenges allows us to offer unrivalled expertise, flexibility and scalability to meet a variety of objectives and demands.



Singapore Woodlands levels 3 to 6

## Customer Space

1,500 W/m<sup>2</sup> as standard with higher power density solutions available

■ Technical Suite

## OUR SINGAPORE WOODLANDS DATA CENTRE SOLUTIONS WILL INCLUDE:



### PRIVATE SUITES

A rapidly growing number of businesses are now enjoying the benefits of outsourcing their IT infrastructure and mission critical systems into Global Switch Private Suites. These self-contained areas, which can include 24x7x365 network operating centre facilities, are designed and built to customers' bespoke specifications.



### CAGES

Global Switch Cages offer the benefits of large-scale resilience for medium sized IT space requirements. This solution provides secure private areas for customers and offers flexibility in design and layout.



### MEET ME ROOMS

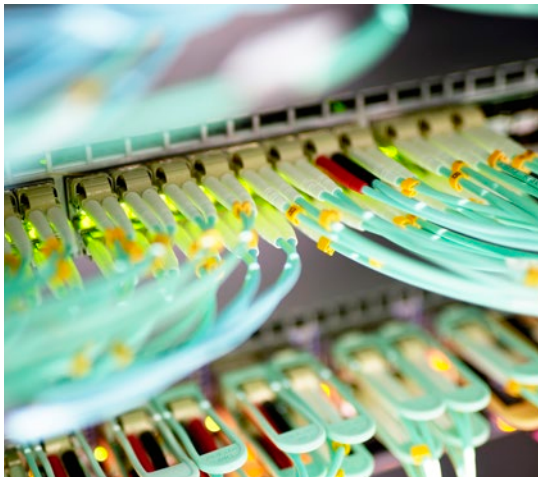
Our carrier neutral status ensures that carriers and ISPs are able to establish Points of Presence throughout our portfolio of data centres. Our diversely routed Meet Me Rooms ensure that customers can connect directly to all major global and national carriers and telecommunication service providers.



### ADDITIONAL SERVICES

Our range of additional services extends from tailored private offices and meeting rooms through to remote hands, technical cleaning, cable management and secure storage.





Images from existing Global Switch data centres

## TECHNICAL SPECIFICATION

### Main Structural Features

- Reinforced concrete frame with reinforced concrete floors, concrete walls with external metal cladding
- 6m slab to slab height
- Raised floor height of 900mm
- Minimum height from raised floor: 3.5m clear to underside of ceiling
- Floor loading of 15N/m<sup>2</sup>
- 1 goods lift (5 tonnes), 3 passenger lifts

### Power

- 22kV utility supply with N+N redundancy
- Utility power supply capacity of 30MVA (planned)
- Technical (IT) power and mechanical systems supplied by on-site Diesel Rotary UPS with N+2 redundancy
- Fully diverse power distribution to technical areas
- On-site fuel storage to support 24 hours at full capacity with 24x7x365 fuel delivery
- Offering 1,500W/m<sup>2</sup> as standard, with higher power density solutions fully supported

### Cooling

- 25MW of installed cooling provision
- Minimum N+1 resilience on all systems
- CRAH units control temperature and humidity in technical space within the recommended range of ASHRAE TC9.9
- Diverse distribution pipework throughout
- Chilled water cooling system

### Security

- Operations Centre manned 24x7x365
- Security guard patrols 24x7x365
- Continuous CCTV surveillance of external and internal areas
- CCTV records kept for 90 days
- Comprehensive intruder detection and alarms to all areas
- Perimeter Intrusion Detection system (PIDs)
- Strict access control procedures to ISO 27001
- Access control using proximity card readers and biometric systems
- Physical access via mantrap
- Secure managed delivery and loading area available 24x7x365
- Compliant with Monetary Authority of Singapore's (MAS) TVRA requirements

### Connectivity

- Carrier Neutral
- Network dense with access to multiple global and regional carriers and Internet service providers offering Dark Fibre, Wavelength, Ethernet, MPLS, VPLS, IP Transit, Peering, CDN, Storage, Virtualised Services (SDN), Voice and Mobile Services
- Access to multiple cloud services through leading public, private and hybrid cloud solution providers
- 2 dedicated Meet Me Rooms
- 4 diverse building entry points
- Diverse cable routes and pathways
- Diverse cable pathways linking to Global Switch Singapore Tai Seng and multiple other locations within Singapore
- Roof space availability for satellite and antennae equipment

### Fire Detection and Suppression

- Analogue addressable fire detection system in all areas
- Aspirated early warning smoke detection system (monitored 24x7x365)
- Inert gas suppression system in technical areas with dry pipe pre-action sprinkler system for additional resiliency

### Critical Environments Management

- Experienced 24x7x365 facilities management team
- Environmental (thermal conditions) monitored 24x7x365
- All Building Management Systems (BMS) monitored 24x7x365
- Comprehensive energy metering system
- Internationally recognised critical environments programme

### Other Services

- Cross connects
- Customer reports
- Deliveries and storage
- Design and build
- Fit out
- On-site facilities
- Remote Hands
- Technical cleaning and waste disposal

### Certifications

- ISO 9001, 14001, 27001, 45001, 50001



Leading the way for the data centre industry, Global Switch is the only choice for resilience, innovation, scalability and agility.

We look forward to welcoming you to our world class Singapore Woodlands data centre and becoming your local and worldwide data centre partner.

**Global Switch Singapore Woodlands**

Woodlands Avenue 12, Singapore 738990  
+65 6858 5008  
[salesingapore@globalswitch.com](mailto:salesingapore@globalswitch.com)

The information provided in this brochure is intended to be used for illustrative purposes only and does not constitute part of any offer or offer to contract. This brochure is given with no knowledge of your needs or requirements, and any information herein contained is not warranted as accurate or complete. Global Switch Limited and its group companies accept no liability arising due to your reliance upon the contents of this brochure. © Global Switch 2018

All artist impressions are indicative.





## CONTACTS

### Corporate Office

+44 (0)20 7802 5150

info@globalswitch.com

## DATA CENTRES

### ASIA-PACIFIC

#### Global Switch Hong Kong

+852 3955 1000

saleshongkong@globalswitch.com

#### Global Switch Singapore

+65 6858 5008

salessingapore@globalswitch.com

#### Global Switch Sydney

+61 (0) 2 9566 7000

salessydney@globalswitch.com

### EUROPE

#### Global Switch Amsterdam

+31 (0) 20 6666 300

salesamsterdam@globalswitch.com

#### Global Switch Frankfurt

+49 (0)69 74 22 70

salesfrankfurt@globalswitch.com

#### Global Switch London

+44 (0)20 7473 9000

saleslondon@globalswitch.com

#### Global Switch Madrid

+34 91 312 06 00

salesmadrid@globalswitch.com

#### Global Switch Paris

+33 (0)1 55 90 04 60

salesparis@globalswitch.com