SYNECTICS

Synergy

Anytime, Anywhere Access to the Control Room

Effortlessly manage incidents, view live and recorded video, and access system reports and dashboards in a web browser, all secured by robust cybersecurity protection, without the need for dedicated client hardware.



Remote Access to Your Surveillance Video

Optimised for Video

Multiple users can view up to 24 simultaneous live and recorded video streams. Display up to 4 video windows per browser session using low-latency WebRTC video or MJPEG. Preserve bandwidth with video quality settings.

Oirect Control

Stay on top of the situation with direct control of cameras, including PTZ, focus, presets and salvos.

Cybersecure

Video data is streamed on request and is not saved to the local device. The video can only be accessed by strict authentication and authorisation. All communications are encrypted.

Great User Experience

Provides users with a familiar Synergy experience without additional training requirements, whether on a desktop, laptop or tablet.

√ No Plug-Ins

Works natively in modern web browsers without the need for locally installed software and plug-ins.

Information At-A-Glance

Dynamic dashboards display real-time data for informed decision-making and the event feed gives you more situational awareness. Generate the reports you need when you need them.

Key Features

- Access to live and recorded video footage
- Control of cameras, including presets and salvos
- Up to 4 video windows per browser session
- Inputs: encoders, SD, HD IP, MP and 4K cameras
- Configurable stream outputs to preserve bandwidth
- Clip video to create incidents

- Synergy client workstation is not required
- Strict permission configuration for web-only access
- Dynamic dashboards and reports
- Incident and event feed for viewing real-time incidents, system state and customisable daily logs
- Video statistics measure daily stream utilisation

Server Specifications

The stated performance of Synergy web is based on using a dedicated Synergy web server with the following specification.*1

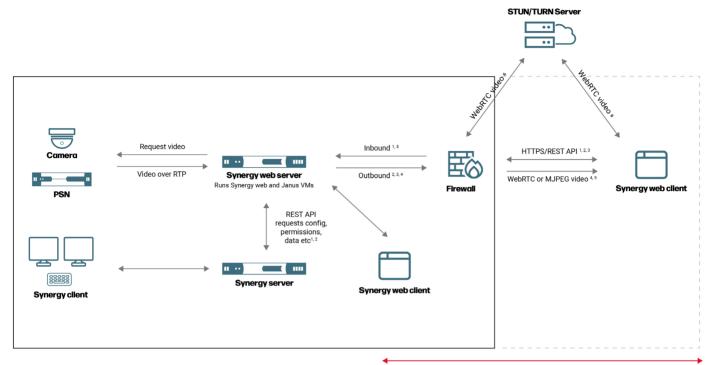
GENERAL	SYNERGY SERVER MAX		
Dimensions (W x H x D)	1U rack-mountable server 440 mm x 43 mm x 773 mm (17.3" x 1.7" x 30.4")		
Weight	Maximum 20.2 kg		
Operating Temperature	ASHRAE A2 (10-35°C if altitude is 900m or below)		
Operating Humidity	ASHRAE A2: 8% to 80%; maximum dew point: 21°C (70°F)		
Certifications and Approvals	CE, FCC, UKCA, NOM, KC, cTUVus, EAC, GS		
Security	Lockable front bezel included		
Operating System	Windows Server IoT 2022		
CPU	AMD Epyc 16 Core CPU		
RAM	64GB ECC (error-correcting code) RAM		
Host OS Storage	2x 480GB M.2 SSDs with RAID 1 resilience		
VM and Data Storage	Up to 3.6TB of RAID 1 storage (4x 4TB enterprise HDDs) Up to 54TB of RAID 5 protected storage (4x 20TB enterprise HDDs)		
POWER	SYNERGY SERVER MAX		
Hot Swap PSUs	2x redundant 1100W PSU modules		
PSU Efficiency	80 Plus Platinum		
Typical Power Consumption (Based on Maximum Configuration)	180w (614 BTUs per hour)		
CONNECTIVITY	SYNERGY SERVER MAX		
CONNECTIVITY Networking (Standard)	SYNERGY SERVER MAX 2x 10Gbps RJ45 (10G-BASE-T) via included network adapter		
Networking			
Networking (Standard) Networking	2x 10Gbps RJ45 (10G-BASE-T) via included network adapter 2x 10Gbps SFP+ 4x 10Gbps RJ45		
Networking (Standard) Networking (Optional Alternatives) Out-Of-Band (OOB) Networking	2x 10Gbps RJ45 (10G-BASE-T) via included network adapter 2x 10Gbps SFP+ 4x 10Gbps RJ45 4x 1Gbps RJ45		
Networking (Standard) Networking (Optional Alternatives) Out-Of-Band (OOB) Networking (Dedicated Management and Health Toolset)	2x 10Gbps RJ45 (10G-BASE-T) via included network adapter 2x 10Gbps SFP+ 4x 10Gbps RJ45 4x 1Gbps RJ45 1x RJ45 Front: 1x USB 3.1 G1 Type-A, 1x USB 2.0 Type-A		
Networking (Standard) Networking (Optional Alternatives) Out-Of-Band (OOB) Networking (Dedicated Management and Health Toolset) USB	2x 10Gbps RJ45 (10G-BASE-T) via included network adapter 2x 10Gbps SFP+ 4x 10Gbps RJ45 4x 1Gbps RJ45 1x RJ45 Front: 1x USB 3.1 G1 Type-A, 1x USB 2.0 Type-A Rear: 3x USB 3.1 G1 Type-A		
Networking (Standard) Networking (Optional Alternatives) Out-Of-Band (OOB) Networking (Dedicated Management and Health Toolset) USB Video Other	2x 10Gbps RJ45 (10G-BASE-T) via included network adapter 2x 10Gbps SFP+ 4x 10Gbps RJ45 4x 1Gbps RJ45 1x RJ45 Front: 1x USB 3.1 G1 Type-A, 1x USB 2.0 Type-A Rear: 3x USB 3.1 G1 Type-A Rear: VGA		
Networking (Standard) Networking (Optional Alternatives) Out-Of-Band (OOB) Networking (Dedicated Management and Health Toolset) USB Video	2x 10Gbps RJ45 (10G-BASE-T) via included network adapter 2x 10Gbps SFP+ 4x 10Gbps RJ45 4x 1Gbps RJ45 1x RJ45 Front: 1x USB 3.1 G1 Type-A, 1x USB 2.0 Type-A Rear: 3x USB 3.1 G1 Type-A Rear: VGA Front: Diagnostics Port		
Networking (Standard) Networking (Optional Alternatives) Out-Of-Band (OOB) Networking (Dedicated Management and Health Toolset) USB Video Other PRODUCT FUNCTIONALITY	2x 10Gbps RJ45 (10G-BASE-T) via included network adapter 2x 10Gbps SFP+ 4x 10Gbps RJ45 4x 1Gbps RJ45 1x RJ45 Front: 1x USB 3.1 G1 Type-A, 1x USB 2.0 Type-A Rear: 3x USB 3.1 G1 Type-A Rear: VGA Front: Diagnostics Port		
Networking (Standard) Networking (Optional Alternatives) Out-Of-Band (OOB) Networking (Dedicated Management and Health Toolset) USB Video Other PRODUCT FUNCTIONALITY System Health Monitoring	2x 10Gbps RJ45 (10G-BASE-T) via included network adapter 2x 10Gbps SFP+ 4x 10Gbps RJ45 4x 1Gbps RJ45 1x RJ45 Front: 1x USB 3.1 G1 Type-A, 1x USB 2.0 Type-A Rear: 3x USB 3.1 G1 Type-A Rear: VGA Front: Diagnostics Port SYNERGY SERVER MAX Configured as standard with Synergy alerts		
Networking (Standard) Networking (Optional Alternatives) Out-Of-Band (OOB) Networking (Dedicated Management and Health Toolset) USB Video Other PRODUCT FUNCTIONALITY System Health Monitoring Out-Of-Band Management with IP-KVM	2x 10Gbps RJ45 (10G-BASE-T) via included network adapter 2x 10Gbps SFP+ 4x 10Gbps RJ45 4x 1Gbps RJ45 1x RJ45 Front: 1x USB 3.1 G1 Type-A, 1x USB 2.0 Type-A Rear: 3x USB 3.1 G1 Type-A Rear: VGA Front: Diagnostics Port SYNERGY SERVER MAX Configured as standard with Synergy alerts Yes		
Networking (Standard) Networking (Optional Alternatives) Out-Of-Band (OOB) Networking (Dedicated Management and Health Toolset) USB Video Other PRODUCT FUNCTIONALITY System Health Monitoring Out-Of-Band Management with IP-KVM SNMP Alarm Support Performance Optimised 4K	2x 10Gbps RJ45 (10G-BASE-T) via included network adapter 2x 10Gbps SFP+ 4x 10Gbps RJ45 4x 1Gbps RJ45 1x RJ45 Front: 1x USB 3.1 G1 Type-A, 1x USB 2.0 Type-A Rear: 3x USB 3.1 G1 Type-A Rear: VGA Front: Diagnostics Port SYNERGY SERVER MAX Configured as standard with Synergy alerts Yes Yes		
Networking (Standard) Networking (Optional Alternatives) Out-Of-Band (OOB) Networking (Dedicated Management and Health Toolset) USB Video Other PRODUCT FUNCTIONALITY System Health Monitoring Out-Of-Band Management with IP-KVM SNMP Alarm Support Performance Optimised 4K Sector Size for HDDs	2x 10Gbps RJ45 (10G-BASE-T) via included network adapter 2x 10Gbps SFP+ 4x 10Gbps RJ45 4x 1Gbps RJ45 1x RJ45 Front: 1x USB 3.1 G1 Type-A, 1x USB 2.0 Type-A Rear: 3x USB 3.1 G1 Type-A Rear: VGA Front: Diagnostics Port SYNERGY SERVER MAX Configured as standard with Synergy alerts Yes Yes Yes		

^{*1}Synergy Server Max can be used as a dedicated web server or compartmentalised depending on the size of your estate and your requirements. For further information about the Synergy Server Max visit the Synectics website.

Synergy Server Max V1 1U - 3.6TB RAID 1		
Synergy Server Max V1 1U - 10.8TB RAID 1		
Synergy Server Max V1 1U - 21TB RAID 1		
Synergy Server Max V1 1U - 32TB RAID 1		
Synergy Server Max V1 1U - 43TB RAID 1		
Synergy Server Max V1 1U - 54TB RAID 1		
Synergy software for web client and mobile app, annual subscription (includes 5 user licenses)		
Synergy web user license (Annual Subscription)		

SPARE PART CODES		
SY-CRU-PSU-L1	1100W PSU Module for Synergy Server Max V1 and PSN/Locker Max V1	
SY-CRU-M2SSD-L1	480GB M.2 OS SSD for Synergy Server Max V1 and PSN/Locker Max V1	
SY-CRU-RAID1U-L1	RAID Controller for Synergy Server Max V1	
SY-CRU-RACK-L1	Rack Mount Kit for Synergy Server Max V1 and PSN/Locker Max V1	
SY-CRU-FAN-L1	Internal Fan for Synergy Server Max V1	
SY-HDD-SAS-4KN-4TB-L	4TB Enterprise SAS HDD for Max Hardware (4K Sector Size)	
SY-HDD-SAS-4KN-8TB-L	8TB Enterprise SAS HDD for Max Hardware (4K Sector Size)	
SY-HDD-SAS-4KN-12TB-L	12TB Enterprise SAS HDD for Max Hardware (4K Sector Size)	
SY-HDD-SAS-4KN-16TB-L	16TB Enterprise SAS HDD for Max Hardware (4K Sector Size)	
SY-HDD-SAS-4KN-20TB-L	20TB Enterprise SAS HDD for Max Hardware (4K Sector Size)	

Architecture and Port Utilisation



The Synergy web client can be used outside or inside a closed site

#	DESCRIPTION	PORT (*CONFIGURABLE)
1	Inbound HTTP/HTTPS traffic from Synergy web client	80/443*
2	Outbound Synergy Server REST API	8099*
3	Outbound Synergy Server Generic Request service	9876*
4	Outbound Janus TCP	8088
5	Inbound Janus RTSP	554
6	WebRTC video via STUN/TURN (negotiated port)	19302

A DNS registered domain name is highly recommended if using the Synergy web client over the internet. $^{\prime 2}$

An SSL certificate for HTTPS should be registered to the domain name used for Synergy web client access.



^{*2} Within a closed site, access is permissible via a browser using a local IP address.