



# Cloudivue<sup>®</sup>

Physical Security as a Service

The power behind your mission - for safer and more sustainable workplaces.

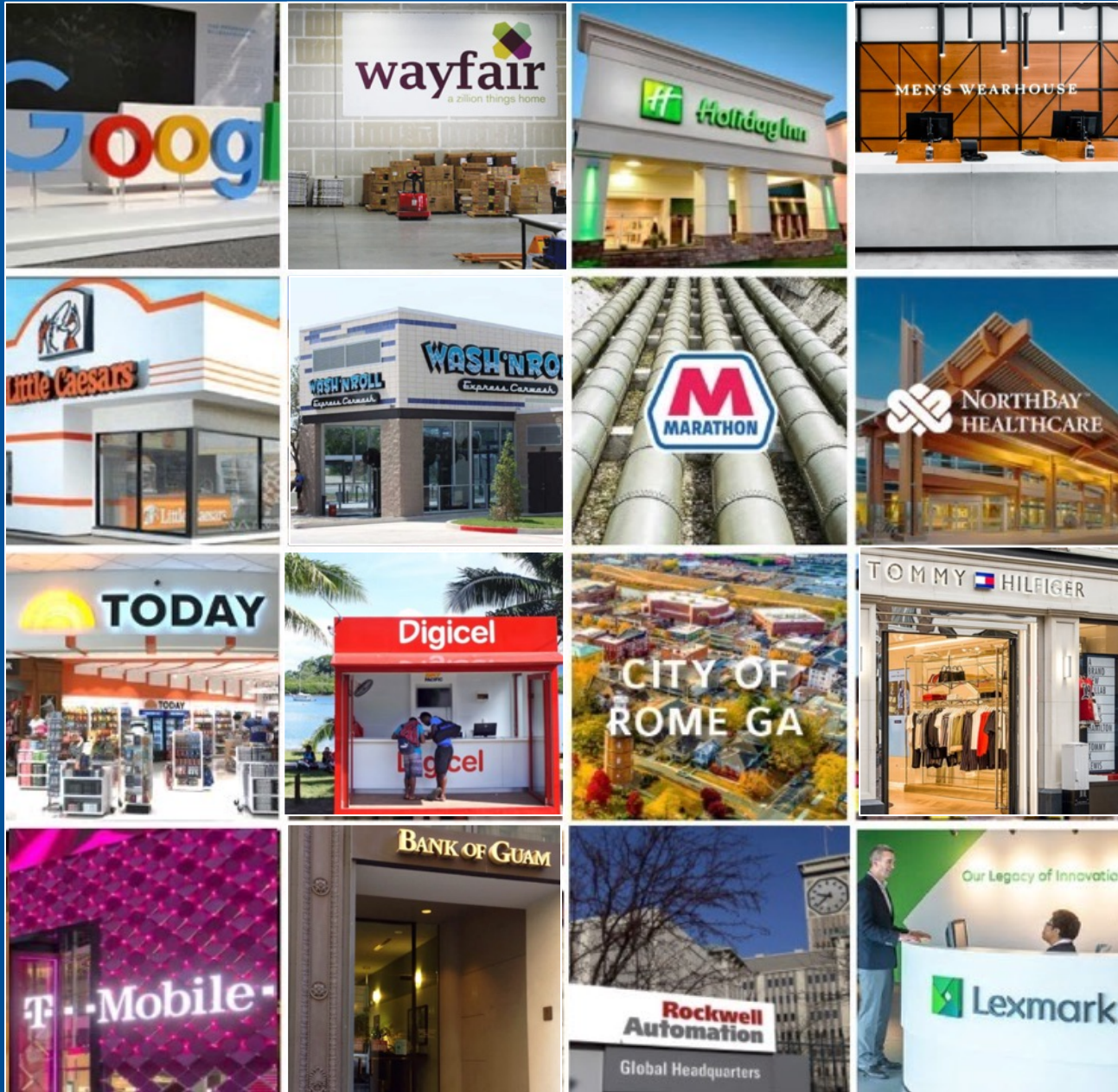




Cloudvue is the physical security as a service suite from Johnson Controls

Cloudvue makes workplaces safer and more sustainable with smart, simple to use and cost-effective video surveillance and access control



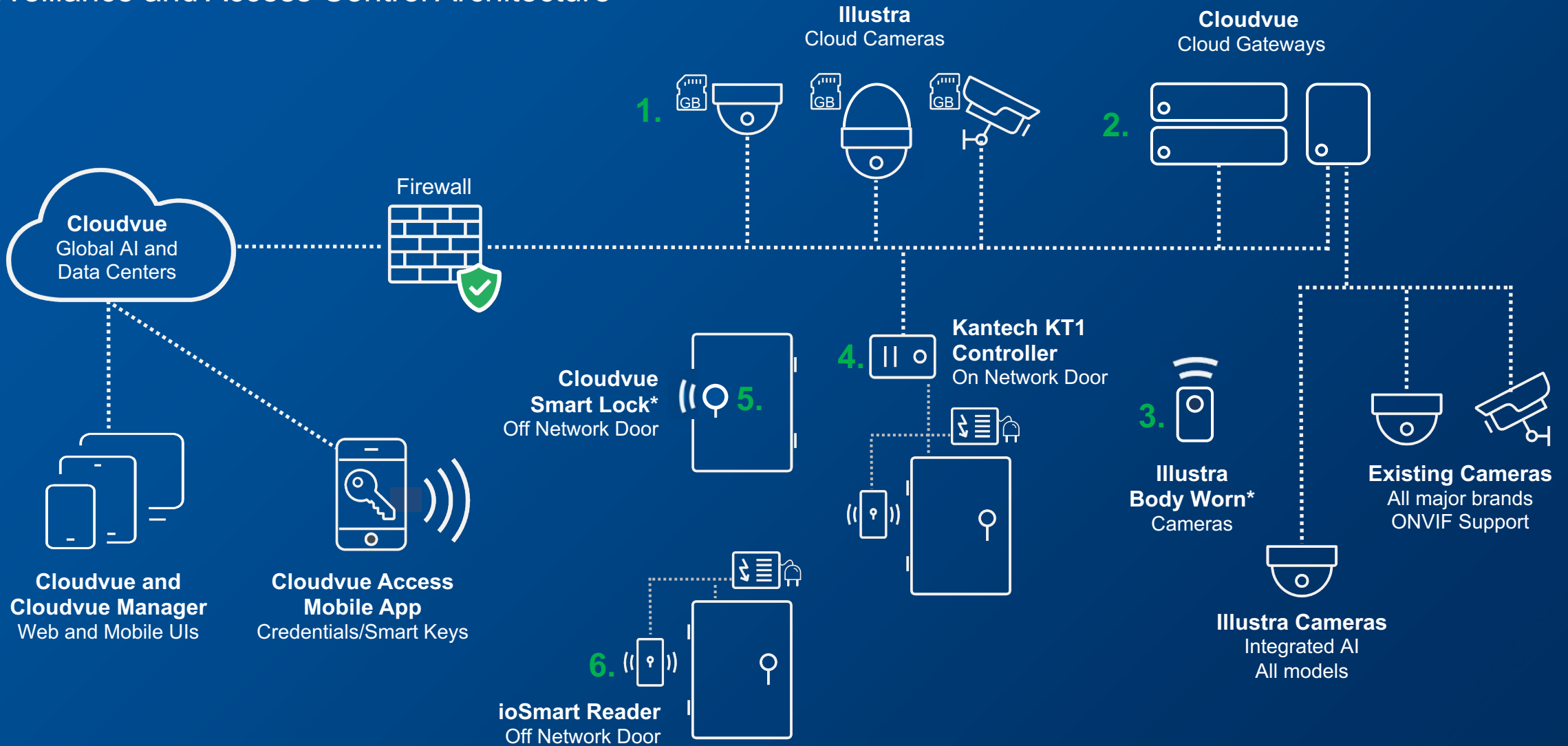


Thousands of Businesses  
Worldwide Protect Their  
Workplaces With Cloudivue



# Cloudvue Security Suite

## Surveillance and Access Control Architecture



## Video Surveillance



2MP/4MP/8MP Pro  
AI Gen 4 Dome  
(2022)



2MP/8MP Pro  
AI G4 42X/22X PTZ  
(2022)



2MP Essentials  
Mini Dome  
Fixed/Varifocal



3MP/8MP Flex  
Mini Dome  
Camera



3MP/8MP Flex  
Bullet  
Camera



2MP Essentials  
Bullet  
Fixed/Varifocal



20MP Pro  
AI G4 Multi Sensor  
(2022)



Body Worn Pro  
4G / Wi-Fi  
(2022)



2MP Pro  
Embedded  
Camera

### Illustra Cloud Cameras

- + No NVR Required
- + 2MP to 20MP Multi-Sensor to 4G Body Worn
- + Plug and Play Installation on Most Networks
- + Internal Storage to 1TB and Cloud Up to 5 Years
- + Cloudvue User and Device Management



TCGD  
4 Cameras  
1TB Storage



TCGK  
16 Cameras  
2TB Storage



TCG T/P/S Series  
24/32/40 Cameras  
4-40TB Storage



TCGR Series  
100 Cameras  
36-120TB RAID6

### Cloudvue Cloud Gateways

- + Replaces Existing NVRs
- + Cloud Enables Existing IP or Analog Cameras
- + Plug and Play Installation on Most Networks
- + Up to 120TB Internal and 5 Years in Cloud
- + Cloudvue User and Device Management

## Access Control



Cloudvue  
Smart Lock  
2022



ioSmart  
Readers



Kantech KT1 Cloud  
Controller

### ioSmart and Kantech Readers, Controllers and Smart Locks

- + Reader and Smart Lock Off Network
- + 1 Door Controller On Network
- + Replaces Application Servers
- + Smartphone Credentials and Smart Keys
- + Cloudvue User and Device Management



## Elegantly Simple User Experience

- Access Control and Video Surveillance in One Web Interface
- Search Video and Receive Alerts on Detection of People, Vehicles, or Motion
- Scan 24 Hours of Recorded Video and Events in Seconds with Hyperview
- Quickly Access up to 5 Years of Cloud Recorded Video
- Manage Doors, Employees, and Access Control Schedules
- Experience Quick Response on Any Network from Cellular to Fiber
- Award-Winning Native Mobile Apps





## Powerful Enterprise Management

- Global Status Map and Operations Dashboard with Instant System Alerts
- Powerful Enterprise Management of Cameras, Doors, Users and Services
- Auditing, Billing, E-commerce and Detailed System Use Logging
- Unlimited and Tiered Permission Levels
- Bandwidth Utilization Tracking and Management Across the Enterprise
- Device Firmware and OS Release Management
- 140 Countries Multiple Global Instances



# Seamlessly Integrated Video Intelligence

Easy to enable event-based recording, event alerts, and fast forensic searching with any connected camera

- People, Vehicle and Motion
- Activity Heat Maps
- Like Appearance Search People
- Like Appearance Search Vehicles\*
- Attribute Search People and Vehicles\*
- Advanced Object Classification\*

Add Illustra Pro Cameras for

- Crowd Formation, Object Detect/Left, Enter, Exit, Queue, Linger and Dwell

New intelligence features added quarterly

\*2022



# The Innovative Advantages: Why Businesses Globally Choose Cloudivue

- 1) **Non-Proprietary** (No Vendor Lock-in)
- 2) **Supports Existing Camera Investment** (No New Cameras to Buy)
- 3) **Simple to Use** (Elegant Web Interface and Award-Winning Mobile Apps)
- 4) **Proven Cyber Security** (20 Years Without a Data or Privacy Breach)
- 5) **Unequaled Experience** (52 Billion Minutes of Video Uploaded and Managed)
- 6) **Cost Leader** (Save 20% to 40%)

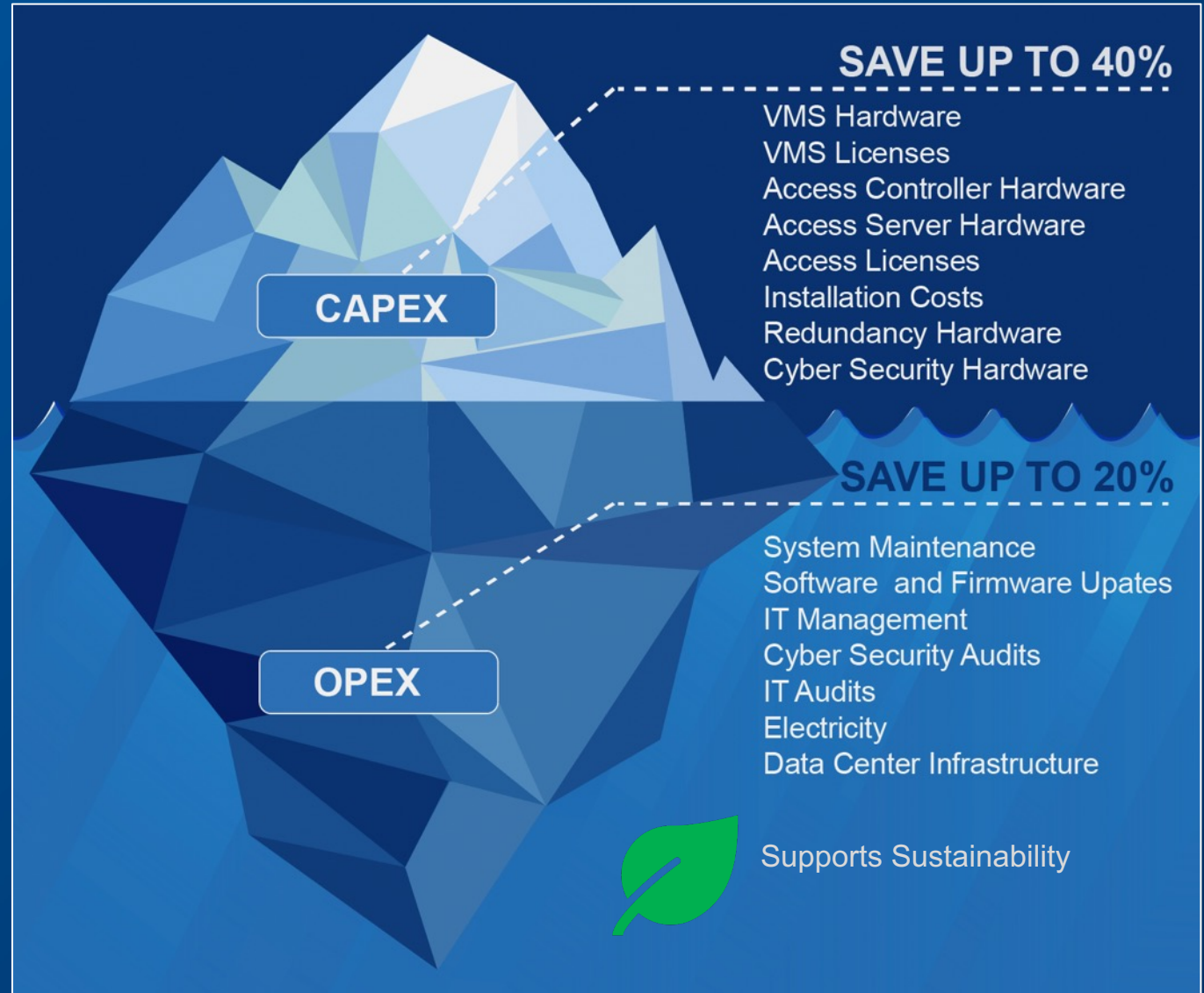


## Cost Advantages

- Save 20-40% on Total Cost of Ownership over Legacy Systems
- Save Capital on Hardware, Licenses, Redundancy
- Save Operating Expenses on Maintenance, Electricity, Cyber

## Sustainability Leadership

- Eliminates Significant Video Surveillance and Access Control Servers and Device Hardware
- Reduces Energy Use with Cloud Services That Scale Up and Down on Demand







## Q&A

How can Cloudvue make your world a safer place?

# Appendix 1: Key IT Considerations

Legacy Security System Risks	Cloudvue Advantages
Out of date firmware	Firmware updated continuously
Insecure Storage of Video and Access Control Data	Replaces spinning drives with solid state storage in cloud cameras plus unlimited cloud backup
Cyber Risks with Video and Access Control Data Transmission	Encrypted secured video at capture, transport and storage
Open ports and inbound access	Outbound connections and no accessible servers on devices
Single point of failure	Video stored in each camera with double redundant cloud storage
User access risk	Fully audited access with specific permission controls
Insecure remote access	2 factor authentication, single sign-on integrations, biometric ID
Inadequate failure notice, tracking, and debugging	Instant automated alerts on any device failure with detailed system logging



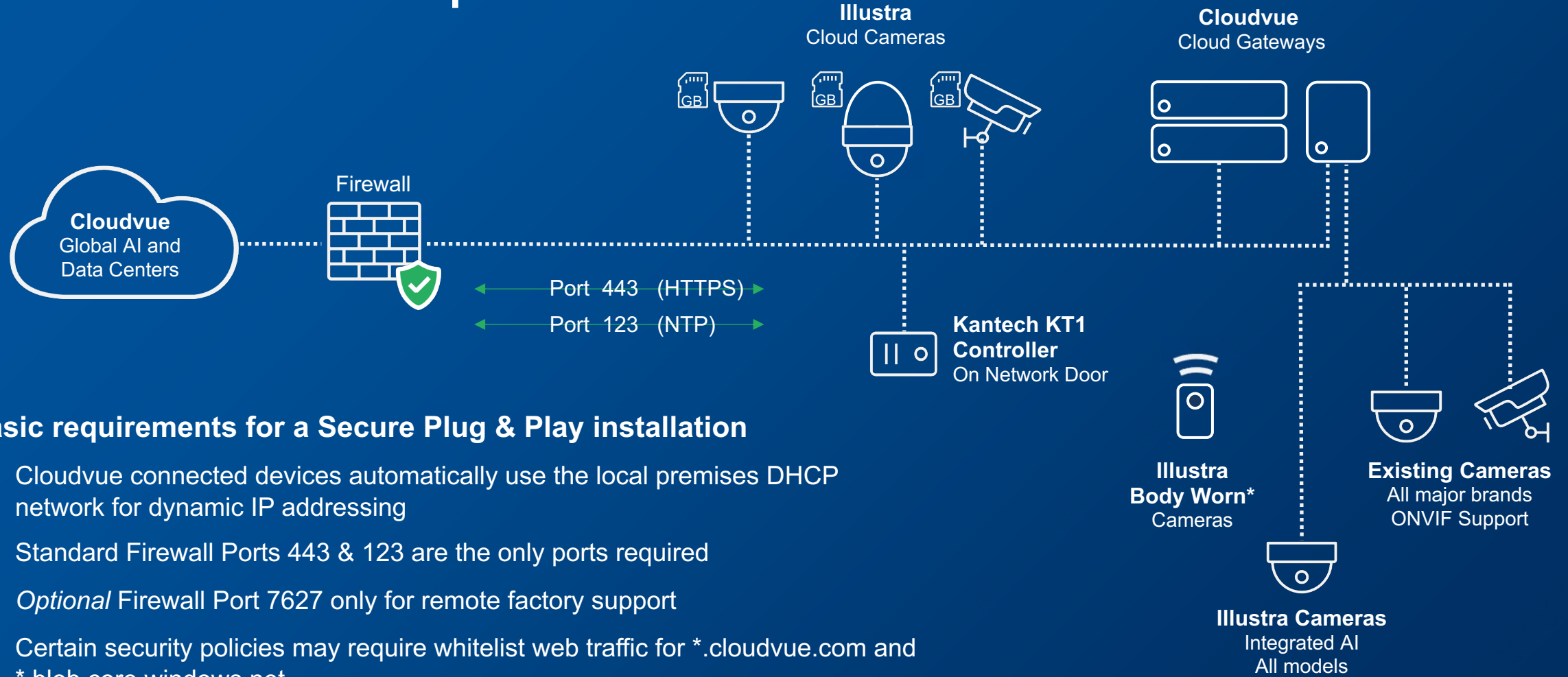


## Appendix 2: Select Cyber Security Features

- Single Sign-On Okta SAML
- 2FA - two factor authentication
- AES-192-CBC
- TLS 1.2+
- Data encryption at rest/transmission
- Outbound with return traffic
- Strong user passwords enforced
- Disabled unused ports/processes
- HTTPS/SSH only
- SSL pinning
- Regular 3<sup>rd</sup> party penetration testing
- Trusted certificates
- Internally audited access
- JCI Cyber and GDPR Protocols



# Appendix 3: Network Requirements



## Basic requirements for a Secure Plug & Play installation

1. Cloudvue connected devices automatically use the local premises DHCP network for dynamic IP addressing
2. Standard Firewall Ports 443 & 123 are the only ports required
3. *Optional* Firewall Port 7627 only for remote factory support
4. Certain security policies may require whitelist web traffic for \*.cloudvue.com and \*.blob.core.windows.net

Ports	Service	Protocol	Direction	Application
443	HTTPS	TCP	Bidirectional	Device authentication & data transport
123	NTP	UDP	Bidirectional	Device time service
7627	SSH Tunnel	TCP	Bidirectional	Device level diagnostics