

LG Cloud Devices

Your Productivity Secured



Why Cloud Devices

What is Desktop Virtualization?

Desktop Virtualization is a VDI¹ technology called the the Second PC Revolution, in which the PC body disappears from the office desk. Users work through PCs or laptops, but the actual computing environment is how servers built in the data center operate. A PC can log in to a server in the data center and be used as needed, and can perform desktop operations continuously using VDI applications that use remote display protocols. Any computer or device can be used without having to carry the same computer around to use the same data and applications. There are many types of VDI services depending on the purpose and environment, and one is "VDI on premises," which has independent servers. The other is "VDI on public cloud," which leases freely. And, there is a hybrid option that has both types of services, VDI on premises and VDI on public cloud.

Comparison of Various Types of VDI Solutions

	•	2.		
	Expense	Flexibility	Security	VDI Solutions
VDI on Premises	High Installation Cost	Low	Extremely High	Citrix VMware
VDI on Public Cloud	'Pay as you go' Subscription	High	High	Amazon WorkSpaces Microsoft Azure

Many organizations and global enterprises are paying close attention to the explosive growth potential of the VDI market. Establishing a cloud-based business environment with Thin Clients and Zero Clients, which are lighter than conventional PCs, allows users accessing and computing by using VDI solutions and ultimately provides benefits such as cost savings, security, and improved productivity. LG Cloud Devices have various Thin Client and Zero Client forms, ranging from All-in-One to Box type, and add value to any work environment, from government to specific industries, with better performance and lower costs than conventional PC devices.

	Comparison of Various Types of Client				
	Thick or Fat Client (Conventional PCs)	Thin Client	Zero Client		
Processor	Over i3-class	Pentium or Celeron	Teradici SoC		
Operating System	Windows, MacOS	Windows Embedded, Linux	-		
RAM	Over 4GB	About 2~8GB	512MB		
Storage	Over 128GB	Over 8GB	-		
VDI Solution	Citrix, VMware, Amazon WorkSpaces, Microsoft Azure	Citrix, VMware, Amazon WorkSpaces, Microsoft Azure	VMware, Amazon WorkSpaces		

1) Virtual Desktop Infrastructure

Why Cloud Devices?



Business Status

Companies are struggling to prevent leakage of information.

As most enterprises are facing various challenges in building integrated infrastructure, reducing operational costs, raising security awareness and increasing data security, they also are struggling to prevent the leakage of core technologies and important information. The following are examples of employee activity on business devices.



Expectation Effectiveness

A cloud environment can strengthen security.

Security is enhanced when replacing existing devices with cloud devices because a cloud environment is more secure than a conventional PC environment. In a cloud environment, it is possible to build integrated infrastructure, reduce operational costs and tighten security. Plus, it allows information to be managed and secured in a central server, reducing the need to store important information in a personal computer.



Business Status

Companies are having trouble with their legacy systems.

The longer a company's history, the more dependent they tend to be on legacy systems. This means that they experience difficulties such as the inability to cope promptly with the changing business environment, or increased IT infrastructure maintenance costs.



Switching to the cloud environment can save up to 51% on TCO annually. Using cloud computing and cloud devices to modernize legacy systems can reduce maintenance and rental costs. An ideal cloud environment can reduce Total Cost of Ownership (TCO) by approximately 51%³.



Total Cost of Ownership, an estimation of all the direct and indirect costs involved in acquiring and operating a product of system over its lifetime

2) IDC, Why Upgrade Your Server Infrastructure Now? (2016)

3) LG Electronics internal data, estimated figure based on 1,000 annual users

Expectation Effectiveness

Work Efficiency How to improve work efficiency

Business Status

Mobility demand is increasing.

In most companies, work does not occur only in a fixed office. Therefore, in order to improve the efficiency of the work, the contents of the network system that enables remote work from outside the office should be considered. In addition, when collaborating with related departments, most companies struggle with the lack of systematically integrated digital administration and inefficient communication among departments, decreasing work efficiency and sustainable profit generation. Also, they need new communication solutions to handle diversification in the workplace and increase collaboration and compatibility among different devices used by each worker.



Expectation Effectiveness

Cloud devices make the working environment pleasant.

When replacing existing devices with cloud devices, the working environment improves. It frees up physical space by reducing the required desk space needed, and it supports a fanless CPU, reducing noise for a more pleasant work environment.

A cloud environment leads digital innovation.

In addition, cloud environments lead to more digital innovation. Through the centralization of data, analyzing customer and market information in real time and efficiently managing and maintaining IT infrastructure allows for resources to be reallocated and improves the operational efficiency of the IT infrastructure. Plus, it establishes a more creative, collaborative organizational culture, enabling innovation in business.

Benefits by Vertical

Finance | Large & Midsized Company | Government | Education | Hospital

Finance



SECURITY

LG Thin Clients never store valuable, sensitive financial information. Instead, that information remains stored at the data center and is only accessible by authorized users, bringing peace of mind to your office and the clients who depend on you.



TCO

Reduce TCO by reducing the number of IT managers and staffing costs. You can create new services and gain a competitive advantage by expanding contacts with customers.



WORK EFFICIENCY

Seconds can make all the difference in the high-stakes world of investing. Trading clunky and demanding PCs for streamlined LG Thin Client Devices lets the office do more with less IT involvement, nearly eliminating potential down-time due to constant updates or maintenance.

Large & Midsized Company



SECURITY

Using a cloud device can strengthen security at the device level. In a Zero Client setup, installation or modification of files by the end user must be approved by an administrator because there is no separate internal storage space. Unlike a Zero Client, a Thin Client does have a certain amount of storage, but it has better security than an ordinary PC environment because the usage and users of storage devices can be restricted through the management console and application.



тсо

Operational cost is composed of the cost required for staff to manage the IT network and the losses incurred due to IT network problems. Normally, an IT network administrator can manage about 65 ordinary PCs per year. In the case of cloud devices, however, one administrator can manage up to 130 devices per year¹. In addition, with a cloud environment, you can easily replace any failed device with another and continue working from where you left off with little or no impact.



WORK EFFICIENCY

Compared to traditional PCs, LG Thin Clients simplify management and compliance. IT administrators can update software and implement rule changes from a single management console – for instance, making software security updates at the data center and limiting the use of USB drives across the Thin Client fleet. The relative simplicity of the process can improve overall compliance and free administrators to focus on other tasks.

Government



SECURITY

Since LG Thin Clients run virtual desktops and applications at the data center, it's difficult for malware and viruses to establish a foothold at the endpoint. In addition, versatile connectivity allows the integration of supplemental measures such as biometric security readers, helping prevent unauthorized access and keeping government and non-profit institutions safe and secure.



тсо

Evolving a traditional, PC-based environment to an LG Thin Client model can help make the most of every hardware dollar spent without sacrificing performance or effectiveness. As a result, you can leverage your budget in a rational way while improving performance.



WORK EFFICIENCY

Save time with a Thin Client fleet that requires less upkeep than most traditional PCs. An entire fleet can be updated from one centralized terminal, virtually eliminating the need to constantly update individual devices.

Education



SECURITY

LG Thin Clients are a natural choice for protecting student data in accordance with the Family Educational Rights and Privacy Act (FERPA), including grades, financial aid information, contact information, and more. Information is stored safely in the data center rather than on employee devices.

TCO

Educational institutions can manage their digital devices with a relatively low resource management budget, making it easy to build a digital learning environment.



WORK EFFICIENCY

LG Thin Clients let students and staff access valuable research tools by logging into their own virtual desktops from any available Thin Client. This model maximizes the usability of every Thin Client, increases user access to shared resources, and helps to maintain endpoint security through dedicated log-in credentials.



SECURITY

No patient data is stored on an LG Thin Client, and important system and application software is centralized at the data center. This structure, combined with centralized data storage, helps to eliminate key vulnerabilities of traditional endpoint devices, making LG Thin Clients a significant part of a robust, HIPAA¹-compliant infrastructure. For additional security, the versatile connectivity of LG Thin Clients allows users to add biometric authentication devices for additional security at log-in.



TCO

Hospitals can more easily offer enhanced healthcare services by reducing their IT maintenance costs.

WORK EFFICIENCY

Optimized healthcare can be achieved by simultaneously reviewing medical information and treating a patient safely via telemedicine. In addition, LG Thin Clients let medical professionals securely log in and access information and resources from a protected data center.

Hospital

What Makes LG Cloud Devices Competitive?

UltraWide™ All-in-One

MULTITASKING

LG boasts not only competitive models within various product types from All-in-One to Box type with the customary specifications, but also high-end products equipped with a 38-inch curved WQHD+ UltraWide[™] display. This 38-inch UltraWide[™] All-in-One has 2.4 times more workspace than a 16:9 Full HD monitor, allowing for virtually seamless office work. You can view more data and charts at once without enlarging or reducing various office programs. In addition, PBP/PIP (Picture by Picture/Picture in Picture) features allow the user to write an email while analyzing lots of data and multiple charts simultaneously on a single monitor without adjusting the window size or switching between programs, by splitting the screen as needed.

IPS Display

CLEAR PICTURE QUALITY AND WIDE VIEWING ANGLE

IPS (In-Plane Switching) technology provides visual comfort for researching or for reviewing documents and charts with others, presenting clear images from virtually any angle with little color distortion. LG's All-in-One Cloud Device, which ranges from Thin Client to Zero Client, uses IPS displays instead of TN (Twisted Nematic) or VA (Vertical Alignment) panels, giving users visual comfort and efficiency no matter which device is selected.

Design

COMPLEMENTS ANY OFFICE ENVIRONMENT

LG's All-in-One Cloud Device has the same look as an LG monitor, allowing it to integrate neatly into the existing office environment. LG is a global innovator in technology and manufacturing and a technology leader in display products, especially TVs and monitors, which are widely used around the world. Therefore, having the same appearance as the commonly used LG monitor delivers many benefits for the office. Screens can be expanded cleanly and visually, naturally creating a virtually seamless multitasking environment.

The Matchmaker

LG has a diverse Cloud Device lineup that can be applied to virtually any business environment. The LG Cloud Device is interoperable, allowing you to connect directly to your existing infrastructure, and is also highly manageable through the management console. We have a high-quality, large-format display lineup, providing a direct solution for business efficiency. Find the best LG Cloud Device for your business.

Step 1

Choose the Zero / Thin Client solutions to suit your business environment.



ZERO CLIENT

Because the device performs only the role of a terminal, it is best for concentrating data and maximizing management efficiency.



THIN CLIENT

High-performance CPU and integrated memory maintain efficient management beyond normal document work, supporting even simple graphics work.

All VDIs

VMware Amazon WorkSpaces

Step 2

Choose either All-in-One or Box Type to suit your existing setup and work environment.



ALL-IN-ONE TYPE The All-in-One Cloud Device with 21:9 UltraWide or 16:9 Conventional format display ensures IPS-based premium picture quality and enables more efficient use of space.



BOX TYPE

Space can be utilized more efficiently with a Box Type Cloud Device, which is lighter than a PC and takes on the role of the PC.

Step **3**

Choose the Zero / Thin Client solutions to suit your business environment.

		THIN CLIENT				ZERO CLIENT					
		All-in-One		Вох Туре		All-in-One		Вох Туре			
		38CL950P	34CN650W 34CN650N	27CN650W 27CN650N	24CK550W 24CK550N	24CK560N	CL600W CL600N	CK500W CK500N	24CK550Z	20Cav37k	CBV42-BP
	IPS Display	I		I		Ø			•	Ø	
	Size	37.5-inch	34-inch	27-inch	24-inch	24-inch			24-inch	20-inch	No Display / No Stand
Display	Aspect Ratio	21:9	21:9	16:9	16:9	16:9			16:9	16:10	
	Resolution	WQHD+	WFHD	Full HD	Full HD	Full HD			Full HD	WXGA+	
	PBP	0						splay / Stand			
	Tilt	Ø	⊘	Ø	Ø	⊘			0	Ø	
Ergonomic	Swivel			⊘	⊘				0	⊘	
Stand	Pivot			•	•	Ø	0	0			
	Height	⊘	⊘	⊘	⊘		• •		⊘		
	4K Resolution Support	0	I	Ø	I	I	I	Ø			
Connectivity	USB Type-C™	Ø		I							
	Display Port			Ø	Ø			Ø	0		Ø
	Fanless Design	0	•	⊘	0		⊘	⊘	•	•	Ø
c	Built-in Speaker	0	Ø	O	0	⊘	Ø		0	•	
Convenience	Mic-in	0	Ø	Ø	Ø	Ø		•	•	•	•
	Webcam	•	•	•							
	VMware	•	0	•	•	Ø		•	ø		
	Citrix	•	•	•	•	Ø					
VDI Support	Amazon WorkSpaces	•	•	⊘	•	⊘		•	•		
	Windows Virtual Desktop						⊘				

Product Brief LG Cloud Device Thin Client

38CK950N-1C

38-inch UltraWide™ All-in-One



34CN650N-6A

34-inch UltraWide™ All-in-One





27CN650N-6A 27-inch All-in-One



Product Brief LG Cloud Device Thin Client



Product Brief LG Cloud Device Zero Client

🔁 LG

24-ck550Z-BP 24-inch All-in-One





Built-in Speaker

20CAV37K-B

20-inch All-in-One









CBV42-BP Box Type

H PColP



Specifications Thin Client

All-in-One Thin Client

Category		UltraWi	ide™ All-in-One	All-in-One			
Mod	del	38CL950P	34CN650W / 34CN650N	27CN650W / 27CN650N	24CK550W / 24CK550N	24CK560N	
	Size	37.5"	34"	27"	23.8"	23.8"	
	Aspect Ratio	21:9	21:9	16:9	16:9	16:9	
-	Panel Type	IPS (Curved)	IPS	IPS	IPS	IPS	
	Resolution	3840×1600	2560x1080	1920x1080	1920x1080	1920x1080	
Display	Brightness (Typ./Min.)	300cd/m ² , 240cd/m ²	300cd/m ² , 240cd/m ²	250cd/m ² , 200cd/m ²	250cd/m ² , 200cd/m ²	250cd/m ² , 200cd/m ²	
	Contrast Ratio	1,000:1 (Typ.)	1,000:1 (Typ.)	1,000:1 (Typ.)	1,000:1 (Typ.)	1,000:1 (Typ.)	
	Response Time (GTG)	5ms (High)	5ms (High)	5ms (High)	5ms (High)	5ms (High)	
	Viewing Angle (CR>10)	178°/178°	178°/178°	178°/178°	178°/178°	178°/178°	
	Processor	AMD V1605 (4core 8thread)	Intel® Celeron J4105	Intel [®] Celeron J4105	AMD Pairie Falcon GX-212JJ	AMD Pairie Falcon GX-212J	
	OS	Windows 10 Professional	34CN650W: Windows 10 IoT Enterprise 34CN650N: Non OS	27CN650W: Windows 10 loT Enterprise 27CN650N: Non OS	24CK550W: Windows 10 IoT Enterprise 24CK550N: Non OS	Non OS	
System	Memory	8GB DDR4	34CN650W: 8GB DDR4 34CN650N: 4GB DDR4	27CN650W: 8GB DDR4 27CN650N: 4GB DDR4	4GB DDR4	4GB DDR4	
	Graphic	Integrated	Integrated	Integrated	Integrated	Integrated	
	Storage (SSD)	128GB	34CN650W: 128GB 34CN650N: 16GB eMMC	27CN650W: 128GB 27CN650N: 16GB eMMC	32GB	32GB	
	DisplayPort	-	1xDP (Output)	1xDP (Output)	1xDP (Output)	1xDP (Output)	
	HDMI	1xHDMI (Input)	1xHDMI (Input)	1xHDMI (Input)	1xHDMI (Input)	1xHDMI (Input)	
Connectivity	USB	4 x USB 3.1, 2 x USB 3.1Type-C (With DisplayPort Out), 1 x USB 3.1 Type-C (in)	1xUSB 3.1 Type-C (With DisplayPort Out), 4 x USB 3.1, 2 x USB 2.0	1xUSB 3.1 Type-C (With DisplayPort Out), 4 x USB 3.1, 2 x USB 2.0	4 x USB2.0 / 2 x USB3.0	4 x USB2.0 / 2 x USB3.0	
	Mic-in				Yes	Yes	
	Headphone Out	Mic-in & Headphone Out Combo	Mic-in & Headphone Out Combo	Mic-in & Headphone Out Combo	Yes	Yes	
Network	Wireless	Intel Dual Band Wireless-9260, 802.11ac 2x2 (BT 5.0 Combo, Internal Dual Antenna)	Dual Band 802.11a/b/g/n/ac 2x2 (BT 5.0 Combo, Internal Antenna)	Dual Band 802.11a/b/g/n/ac 2x2 (BT 5.0 Combo, Internal Antenna)	Intel Dual Band Wireless-AC 3168 1x1 AC (AGN support, BT 4.0 - LE Combo)	Intel Dual Band Wireless-A0 3168 1x1 AC (AGN support, BT 4.0 - LE Comb	
	Bluetooth	BT 5.0	BT 5.0	BT 5.0	over BT4.0	over BT4.0	
	Ethernet	Yes (Gigabit)	Yes (Gigabit)	Yes (Gigabit)	Yes (Gigabit)	Yes (Gigabit)	
Speaker	Built-in Stereo	Yes (10W x 2)	Yes (5W x 2)	Yes (3W x 2)	Yes (3W x 2)	Yes (3W x 2)	
	W x D x H (with Stand)	897.3 x 235 x 634.7 (mm)	825.6 x 230 x 470.7 (mm)	622.3 x 239.6 x 531.7 (mm)	533.8 x 240 x 512.9 (mm)	533.8 x 240 x 512.9 (mm	
	W x D x H (without Stand)	897.3 x 100.3 x 424 (mm)	825.6 x 60.5 x 374.8 (mm)	622.3 x 61 x 371.5 (mm)	533.8 x 67.6 x 333.1 (mm)	533.8 x 67.6 x 333.1 (mm	
mensions & Weight	Weight (with Stand)	10.2kg	8.3kg	7.8kg	6.1kg	6.1kg	
-	Weight (without Stand)	8.8kg	6.6kg	5.6kg	3.95kg	3.95kg	
	VESA	100 x 100 (mm)	100 x 100 (mm)	100 x 100 (mm)	100 x 100 (mm)	100 x 100 (mm)	
Stand	Adjustable Stand	Tilt: -5~15°, Height Range: 100mm	Tilt: -5~15°, Height Range: 100mm	Tilt: -5~15°, Swivel: 0~355° Height Range: 130mm Pivot: ±90° (Bi-directional)	Tilt: -5~35°, Swivel: 0~355° Height Range: 130mm Pivot: ±90° (Bi-directional)	Tilt: -5~35°, Swivel: 0~355° Height Range: 130mm Pivot: ±90° (Bi-directional)	
Webcam	Webcam	Yes	Yes (Full HD, Pop-up type)	Yes (Full HD, Pop-up type)	-	-	
Security	TPM (Trusted Platform Module	Hardware TPM 2.0	Hardware TPM 2.0	Hardware TPM 2.0	Software TPM	Software TPM	
Standard	Medical Standard	_	_	-	-	IEC60601. CE MDD. FDA Clas	

Box Type Thin Client

Ma	del	CL600W	CL600N	CK500W	CK500N	
	Processor	Intel® Celeron J4105		AMD Pairie Falcon GX-212JJ		
System	OS	Windows 10 IoT Enterprise	Non OS	Windows 10 IoT Enterprise	Non OS	
	Memory	8GB DDR4 4GB DDR4		4GB DDR4		
	Graphic	Integrate	ed	Integrated		
	Storage (SSD)	128GB	16GB	32GB		
	DisplayPort	2xDP (Out	put)	1xDP (Out	put)	
	HDMI	-		1xHDMI (Output)		
Connectivity	DVI-I	-	-	1xDVI (Out	put)	
	USB	2 x USB 2.0, 4 x USB 3.1, 1 x USB 3.1	1 Type-C (With DisplayPort Out)	4 x USB2.0 / 2 x USB3.0		
	Mic-in & Headphone Out Combo	Yes		Yes		
_	Wireless	Dual Band 802.11a/b/g/n/ac 2x2 (BT 5.0 Combo, External Antenna)		Intel Dual Band Wireless- (AGN support, BT 4.0		
Network	Bluetooth	BT5.0		BT4.0		
	Ethernet	Yes (Gigal	pit)	Yes (Gigabit)		
Speaker	Built-in Stereo	-		-		
	W x D x H (without Stand)	199 x 137 x 35 (mm)		hout Stand) 199 x 137 x 35 (mm) 180 x 39.9 x 117		17 (mm)
imensions & Weight	Weight (without Stand)	0.8kg		1kg		
	VESA	100 x 100 (mm), 75 x 75 (mm)		100 x 100 (mm), 75 x 75 (mm)		
Security	TPM (Trusted Platform Module)	Hardware TP	M 2.0	Software T	PM	

Specifications Zero Client

All-in-One Zero Client

Model		24CK550Z	20CAV37K	
	Size	23.8"	19.45"	
	Aspect Ratio	16:9	16:10	
	Panel Type	IPS	IPS	
	Resolution	1920x1080	1440x900	
Display	Brightness (Typ./Min.)	250cd/m ² , 200cd/m ²	250cd/m ² , 200cd/m ²	
	Contrast Ratio	1,000:1 (Typ.)	1,000:1 (Typ.)	
	Response Time (GTG)	5ms (High)	14ms	
	Viewing Angle (CR>10)	178°/178°	178°/178°	
	Processor	Teradici TERA2321	Teradici TERA2321	
Guatam	OS	-	-	
System	Memory	512MB	512MB	
	Storage	-	-	
	DisplayPort	1xDP (Output)	-	
	HDMI	-	-	
	DVI-I	=	1xDVI-I (Output)	
Connectivity	D-Sub	1xD-Sub (Input)	1xD-Sub (Input)	
	USB	6 x USB2.0	6 x USB2.0	
	Mic-in	Yes	Yes	
	Headphone Out	Yes	Yes	
Network	Wireless	-	-	
	Bluetooth	-	-	
	Ethernet	Yes (10/100/1000)	Yes (10/100/1000)	
Speaker	Built-in Stereo	Yes (3W × 2)	Yes (5W x 2)	
	W x D x H (with Stand)	553.8 x 512.9 x 240 (mm)	452.3 x 258.6 x 369.4 (mm)	
	$W \times D \times H$ (without Stand)	553.8 × 333.1 × 67.6 (mm)	452.3 x 50.8 x 299.4 (mm)	
nensions & Weight	Weight (with Stand)	6.0kg	4.2kg	
	Weight (without Stand)	3.85kg	3.55kg	
	VESA	100 x 100 (mm)	100 x 100 (mm)	
Stand	Adjustable Stand	Tilt: -5-35°, Swivel: 0~355° Height Range: 130mm Pivot: ±90° (Bi-directional)	Tilt: -5-35°, Swivel: 0-355° Height Range: 130mm, Pivot: 90°	
Webcam	Webcam	-	-	
Security	TPM (Trusted Platform Module)	-	-	

Box Type Zero Client

Mode	el	CBV42-BP		
	Processor	Teradici TERA2321		
Guntari	OS			
System	Memory	512MB		
	Storage			
	DisplayPort	1xDP (Output)		
	HDMI			
	DVI-I	1xDVI-I (Output)		
Connectivity	D-Sub			
	USB	6 x USB2.0		
	Mic-in	Yes		
	Headphone Out	Yes		
	Wireless			
Network	Bluetooth			
	Ethernet	Yes (10/100/1000)		
Speaker	Built-in Stereo	· ·		
	$W \times D \times H$ (with Stand)	70 x 144 x 189 (mm)		
Dimensions & Weight	$W \times D \times H$ (without Stand)	185 x 144 x 31 (mm)		
Dimensions & Weight	Weight (with Stand)	0.66kg		
	Weight (without Stand)	0.66kg		
	VESA	100 x 100 (mm), 75 x 75 (mm)		



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