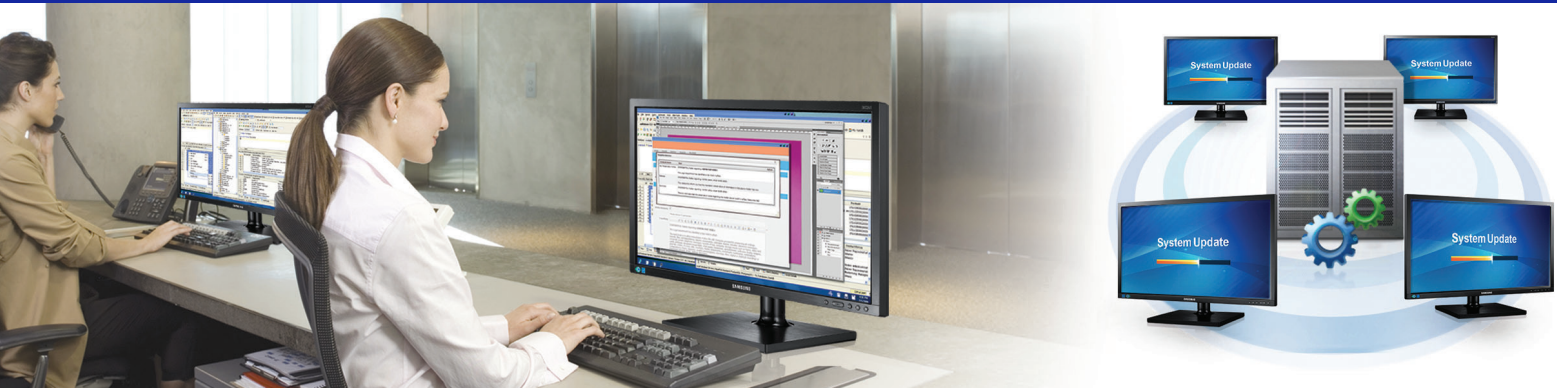# Samsung NC191, NC221 and NC241 Cloud Displays

All-in-One zero client displays with remote data storage for powerful security

Highlights

- Create a more secure computing environment for critical company data with a virtual desktop infrastructure (VDI)
- Contain costs through hardware reductions and power consumption up to 40 percent less than PCs
- Optimize IT infrastructure performance with Teradici® Gen2® chipset
- Unclutter desktops and improve productivity with an All-in-One design and ergonomic features

Enable safer, more cost-effective network computing

Companies that want to upgrade their corporate computing face several challenges. Regulatory requirements demand a higher level of data security. The cost of supporting computing hardware can be prohibitive. Companies that want to retain good employees must provide flexible ways for them to be productive.

Samsung NC191, NC221 and NC241 Cloud Displays help businesses overcome these challenges. Data is stored only on the server, and is backed up regularly, so it remains more secure. Companies can more easily control malware, comply with regulations, protect privacy rights and help prevent intellectual property leakage by managing a virtual desktop environment on a centralized server. Cloud displays are typically less costly to purchase and maintain than conventional PCs. Cloud displays also provide convenient on-site access to virtualized desktops, so workers can access individual resources more easily.

With a small footprint (just 0.05 square meters, or 82 square inches), these All-in-One zero client displays help save valuable office space.

Safeguard valuable corporate assets using an efficient VDI

NC191, NC221 and NC241 Cloud Displays reduce potential security and data loss risks with more secure data storage and streamlined disaster recovery. With VDI data centralized in a networked infrastructure, businesses gain better control over malware and intellectual property leakage. This control helps enhance regulatory compliance and privacy. To further protect data, businesses can set up permissions according to user type, by combining legacy and zero client workstations and by applying corporate policies.

Reduce IT expenditures without losing computing power

Cloud displays offer numerous cost-saving features. With a VDI, most maintenance and support tasks can be performed centrally through the server. This consolidation of work reduces the need for IT professionals to visit each PC individually, decreasing IT costs. Some peripherals, such as speakers, are built in, so they do not need to be purchased. In addition, the eco-friendly design uses up to 40 percent less energy than traditional PCs to help reduce energy costs.[1]

An All-in-One design helps provide an uncluttered working environment.

Create a highly efficient computing environment with advanced technology

Equipped with a Teradici Gen2 chipset using PCoIP remote protocol, NC191, NC221 and NC241 Cloud Displays deliver a more secure, higher-performing desktop experience.

NC191, NC221 and NC241 Cloud Displays are zero client PCoIP cloud displays that are designed to connect easily and effectively with a company's data center. Because software is centrally deployed, IT infrastructure can be easier and less time-consuming to manage. Most maintenance and support tasks, including software upgrades and patches, can be performed centrally and simultaneously, with no need to visit employees' desks.

Offer a clean, productive workspace with streamlined cloud displays

To promote tidy working conditions and help ensure comfortable use over long periods, NC191, NC221 and NC241 Displays are integrated with a variety of ergonomic features. The Height Adjustable Stand (HAS) increases the monitor's height range by up to 100 mm (3.9 in.) in the NC191/NC221 and 130 mm (5.1 in.) in the NC241. Pivot, tilt and swivel settings can adjust to suit each user's needs.

The All-in-One form factor promotes a clean working environment and easier deployment, with fewer cables and simplified assembly. Cloud displays have multiple ports to connect directly to most peripherals. Samsung testing demonstrates that the VDI-based cloud displays use up to 40 percent less power than traditional PCs, so energy costs can be reduced.
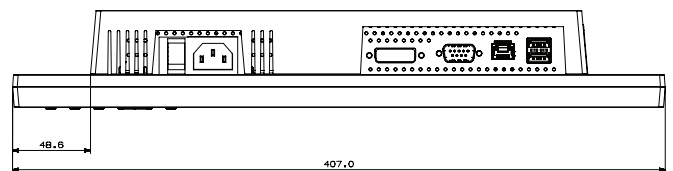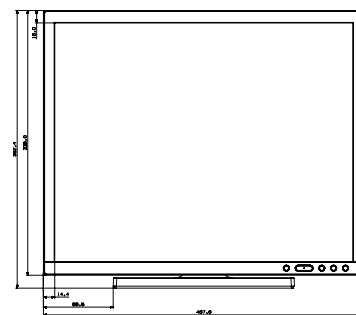

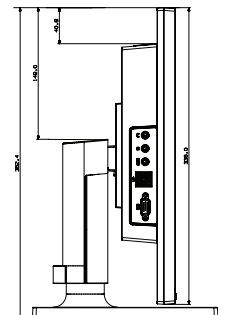Figure 1. NC191 bottom view

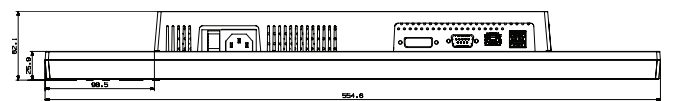Figure 2. NC191 front view

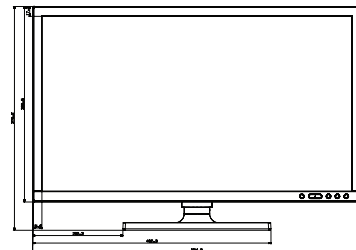Figure 3. NC191 side view

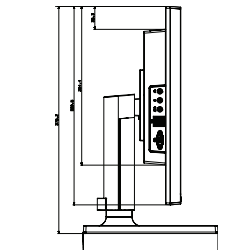Figure 4. NC241 bottom view

Figure 5. NC241 front view

Figure 6. NC241 side view

What is PCoIP?

PCoIP is a remote workstation protocol, the result of a breakthrough in display compression for connecting desktops over existing, standard IP networks. PCoIP technology enables centralized management of enterprise user desktops in the data center, and provides remote users with an exceptional computing platform. The PCoIP protocol compresses, encrypts and encodes the entire computing experience at the data center. Then, PCoIP transmits the experience, through pixels only, across a standard IP network to PCoIP zero clients. The data never leaves the data center. The PCoIP protocol supports high-resolution, full-frame rate 3-D graphics; high-definition (HD) media and audio; multiple large displays; and full USB peripheral connectivity.

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Specifications

			NC191	NC241	NC221
Client	Processor/Graphic RAM/Audio		Teradici Tera2321/DDR3 512 MB/ALC262		
	VMware certification/Ethernet/Fan or fanless		VMware-ready/Gigabit Ethernet/Fanless		
Panel	Size		19"	23.6"	21.5"
	Viewable size		19"	23.6"	21.5"
	Panel type		a-Si TFT active matrix		
	Aspect ratio		5:4	16:9	
	Pixel pitch (H x V)		0.29 mm x 0.29 mm (0.01 in. x 0.01 in.)	0.27 x 0.27 mm (0.01 in. x 0.01 in.)	
	Brightness (typ)		250 cd per sq. m	300 cd per sq. m	250 cd per sq. m
	Contrast ratio (typ)		1,000:1		
	Viewing angle (H x V)		170/160 deg (CR ≥ 10)	170/160 deg (CR ≥ 10)/178/170 deg (CR ≥ 5)	170/160 deg (CR ≥ 10)
	Response time		5 ms	5 ms (white to white)	5 ms
Frequency	Frequency	Horizontal	31 - 80 kHz		
		Vertical	56 - 75 Hz		
	Maximum resolution (H x V) (dual screen)		1,280 x 1,024 (1,920 x 1,200)	1,920 x 1,080 (1,920 x 1,200)	
	Bandwidth		135 MHz	148.5 MHz	135 MHz
	Colors supported		16.7 million		
Signal	Sync type		(1) Separate H/V; (2) Sync on green		
	Input and output		D-sub in, DVI-I out, serial port; USB (2.0 x 4 ea) LAN (RJ45, Giga); Headphone-out port, audio in, MIC in		
Power	Power-on	Maximum	40 W	46 W	46 W
		Typical	17 W	23 W	31 W
	Stand-by		Less than 1.1 W		
Cabinet color	Front and back		Black/black		
Accessory (supplied)	Included in package		(1) User manual; (2) Power cord; (3) Quick Setup Guide; (4) Warranty card		
Accessory (optional)	Speaker		1 W x 2		
	Wall mount		VESA 100 x 100		
Dimension	Set, with stand (W x H x D)		407.0 x 352.9 x 210.0 mm	554.6 x 380.3 x 224.0 mm	504.3 x 435.4 x 210.0 mm
	Set, without stand (W x H x D)		407.0 x 336.0 x 60.6 mm	554.6 x 330.5 x 61.2 mm	504.3 x 301.9 x 61.2 mm
	Packaged (W x H x D)		514.0 x 407.0 x 195.0 mm	626.0 x 400.0 x 195.0 mm	554.0 x 354.0 x 169.0 mm
Weight	Net/Gross		5.0 kg /6.1 kg	6.1 kg /7.6 kg	4.9 kg /6.0 kg
Stand	Type	Swivel	-45° - 45°		
		Pivot	0° - 90°		
		Tilt	-2° - 25°		
		Height adjustable	100 mm (3.94 in.)	130 mm (5.12 in.)	100 mm (3.94 in.)

DATA SHEET

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For more information

For more information about Samsung NC191, NC221 and NC241, visit www.samsung.com/business.

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