



Videowalls built to the room.

Radium is nete2's videowall processor and wall manager. Sources, layouts and controls are configured for the specific room and the people working in it. Because the processor and software are ours, custom modules run natively and the wall grows by adding chassis, not by replacing the core.

Why Radium

A wall controller we can change when your room changes.

Most videowall processors are closed products. When an operations room needs a behaviour the vendor never shipped, the integrator has nothing to offer. Radium runs on our own processor and our own software, so when a site needs a new module it is written in Singapore and runs natively on the wall.

Radium has been in service for more than two decades, from the first system in 2002 to the collaborative systems of 2020 and the HQ gallery installations of today. Every unit is configured to its room, and no two are alike.

24/7 operation

Ruggedised operating system and redundant power supplies for command rooms that cannot go dark, 365 days a year.

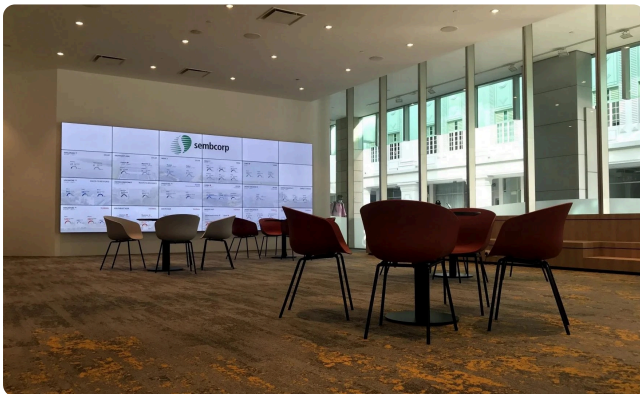
Configured per room

Interfaces and layouts built around the operators' workflow, not a generic template. Touch-friendly wall manager.

Scales by cascade

Add chassis on top of the running core for monumental walls. No second round of commissioning.

Where it runs



Sembcorp HQ gallery, a 6 by 4 Radium wall. Command and operations rooms.

One canvas, any source

Mixed inputs on a single display.

Radium combines different input types on one canvas and lets operators adopt whichever layout the situation calls for. Sources are decoded on the processor, which keeps the hardware count down as the estate grows.

Computers

Applications, remote desktops, BI dashboards

IP streams

Cameras and encoders in MPEG-2, MPEG-4, H.264 and other formats

Web and cloud

Browsers, cloud content, native map applications

Media

Images, video files, video on demand over RTSP and RTP

Live text

RSS feeds, scrolling messages, SMS from gateways

Baseband

DVI, HDMI, VGA, component, SDI, composite and S-Video

Custom modules

Written for the site and running natively on the processor

Sirius

Operator-driven control where Sirius is the platform

Features at a glance

Modular design

Card-based chassis with optional expansion chassis.

PCI Express architecture

Dedicated lanes for bandwidth and quality as sources are added.

Ultra HD output

Quad output card to 2560 × 1600 per output.

Low latency

Real-time information and video content on the wall.

Active source switching

Automatic input detection and video optimisation on switching.

Direct playback

Images and media from local or network storage.

Smart widgets

Live RSS, tickers and widgets rendered on the processor.

Control-system ready

Integrates with premium touch-panel control systems.



Radium Manager

Wall management software for operators, not engineers.

Radium Manager gives operators a graphical interface over every aspect of the wall. It is built for touch panels and for the pace of a live room, with office-style controls so new operators are productive quickly.

Layouts and presets

Drag and drop windows, save positions as presets, recall pre-designed canvas layouts and switch with hotkeys. Edit live or offline for mission-critical rooms.

Access control

User rights and privilege management govern who can change what, and when.

Window management

Smart selection and snap alignment resize or align many windows at once. Snap to grid. Labelled windows for positive source identification on large walls.

Remote and touch

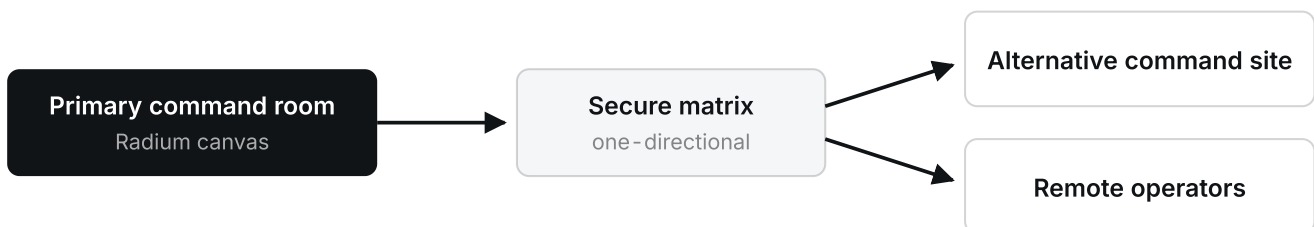
IP-centric remote manager for several rooms. Multi-touch gestures for sizing. Control from iPad and iPhone.

Radium C2 Centre

Sharing between command rooms.

Radium C2 Centre networks remote and alternative command sites so their operators work as one team. Native virtual conferencing allows visual collaboration across command centres, and sharing an entire wall canvas to another room is a single action.

Operators can also select any portion of the canvas and share just that, without reconfiguring the display. Secure matrix switching keeps video transfers one-directional, physically and virtually, so shared content never opens a path back into the source room.



Platform

Card-based chassis on dedicated PCI Express lanes.

Standard 4U master chassis with 6, 9 or 11 card slots. Expansion chassis adds 18 slots for larger walls and more inputs.

Dedicated PCI Express lanes per card rather than switched lanes, for consistent bandwidth as sources are added.

Quad output cards drive up to 2560×1600 per output over DVI-D or HDMI, with dedicated frame buffer memory per GPU. Up to 16 cards per system.

Intel Core i7 and Xeon processors, ruggedised 64-bit Windows, removable dual disks, redundant power supplies.

Integrates with AMX, Crestron and Extron control systems, and with Sirius for operator-driven control.

Case study

Sembcorp HQ gallery.

A 24-panel, 6 by 4 Radium videowall installed at Sembcorp's headquarters gallery at 30 Hill Street, a collaborative gathering space and global operations showcase. Sources, layouts and controls were configured for the room and the way the space is used, and legacy systems were integrated rather than replaced.

Delivered in 16 weeks from site walk to handover, with operator training and documentation the facilities team could use.

"nete2 was able to translate our vision as well as the specifications from our design into reality within our workplace. We are complemented by the professionalism of the team, assisted to integrate our legacy systems, and provided with sound technical advice."

Kok Kin Lee, Vice President, Sembcorp Industries

Specifications

Chassis

Model	Radium SC6	Radium SC9	Radium IXE5	Radium EXP
Processor	Intel Core i7, 64-bit	Intel Core i7, 64-bit	Intel Xeon E5	Expansion only
System memory	8 GB DDR	8 GB DDR	16 GB DDR	n/a
Operating system	Windows Embedded Standard, 64-bit			n/a
Card slots	6 PCI Express	9 PCI Express	11 PCI Express	18 PCI Express
Storage	2 × 500 GB SATA, removable			n/a
Power	Internal, 100 to 240 V AC, 50 to 60 Hz. 600 W maximum, 500 W typical.			
Dimensions	449 (W) x 550 (D) x 177 (H) mm, 4U. Frame weight 13.3 kg.			
Environment	0 to 50 °C, 10 to 90% humidity non-condensing. MTBF 50,000 hours.			

Output card

Card	Connectors	Formats	Memory
O4 quad HD out	4 x DisplayPort	DVI-D and HDMI to 2560 x 1600 at 60 Hz	Dual GPU, 2 × 256 MB frame buffer

Reference specifications. Configurations are built per project. Confirm current components with nete2 before tender.

Specifications

Input cards

Card	Connectors	Accepted formats	Data rate
I2 dual HD in	2 x DVI-I	Component HD to 1080p 60 Hz. HDMI to 1080p. DVI to 1920 × 1200 at 60 Hz. VGA to 2048 × 1536 at 60 Hz. Dynamic input source selection.	650 MB/s
I3 hybrid HD and SD in	1 x DVI-I, 4 x composite or S-Video on 30-pin D-Sub	DVI-I as I2. Standard definition to W576p, composite and S-Video NTSC or PAL.	650 MB/s
I4 octal SD in	8 x composite or S-Video on 2 × 30-pin D-Sub	Standard definition to W576p. Composite and S-Video NTSC or PAL.	480 MB/s
I5 dual 3G-SDI in	2 x BNC in, 2 x BNC loop-through	SMPTE 259M to 370 Mb/s. SMPTE 292M to 1.485 Gb/s. SMPTE 424M to 2.97 Gb/s. 2K digital cinema modes.	650 MB/s

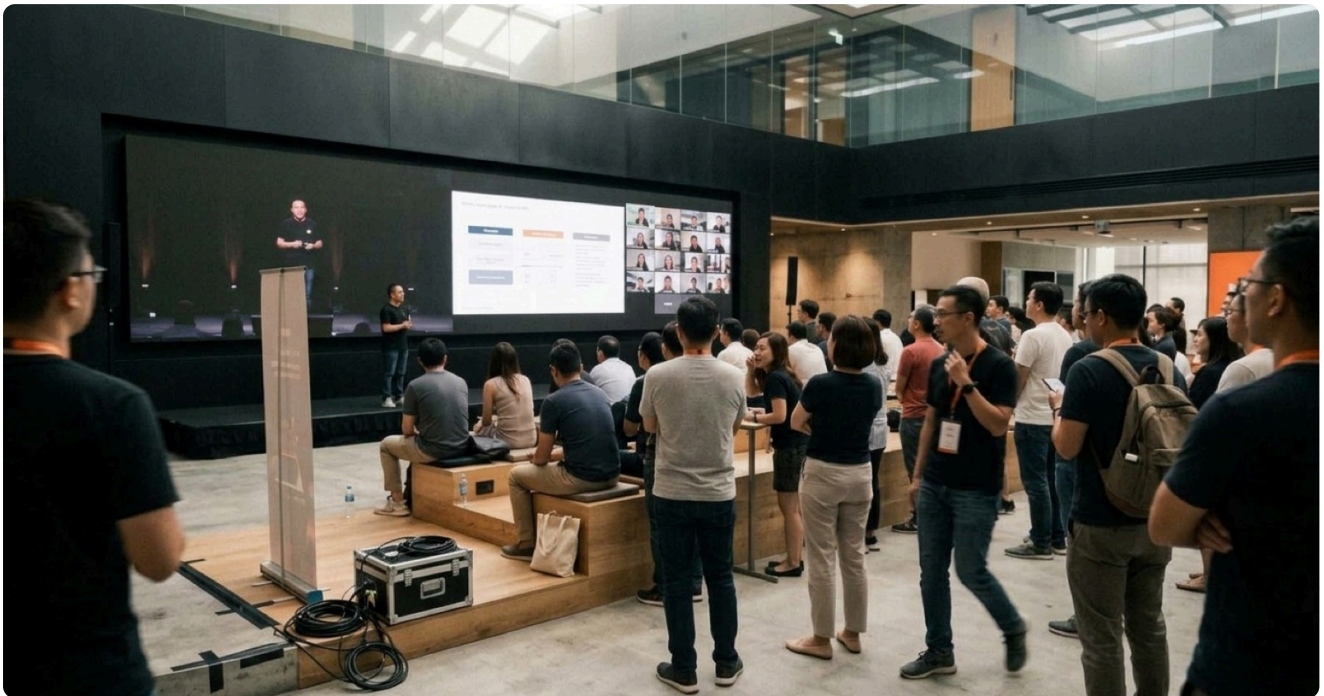
Streaming and playback

Decodes IP streams in MPEG-2, MPEG-4, H.264 and other formats directly on the processor.

Video on demand from Wowza, Windows Media Server and other VOD systems, with RTSP and RTP transport controls.

Receives 3G video sources and SMS text from gateways for real-time display.

Minimum 320 GB local storage for applications and media, ruggedised Windows for direct application control.



Book a demo

Bring the room. We'll bring the wall.

Tell us the room, the sources and who sits in front of it. We will propose a chassis configuration and a layout set, and show Radium Manager on a live wall.

Contact

contact@nete2asia.com
+65 6723 6363
nete2.io/products/radium

Office

nete2 Asia Pte Ltd
#06-01 The Xperience, #06-06 The Sandbox
152 Paya Lebar Road, Singapore 409020