elitedali™ - for Niagara

smart lighting controls

www.elitedali.com

Summary Introduction to Niagara Smart IoT Convergent Lighting Controls

Control Network Solutions (CNS), a Certified Tridium Developer, creates market disruptive SMART web based solutions for building and lighting controls.

"Lighting is the most visible sign of how well you are running your business and your business's attitude towards the environment. In an instant it says more than any words can."



elitedali Multidrop for Niagara, is the only web based smart IoT solution, globally available today, for smart lighting controls of DALI® intelligent addressable light fixtures.

It transforms any suitable Tridium Niagara Framework® BMS, BAS, BACS, BEMS platform into a commissioning, control, management, monitoring and analytics edge device of networks of intelligent DALI® light fixtures in real-time from anywhere.





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DALI (Digital Addressable Lighting Interface) is the only international interoperable open published dedicated communication and control standard (IEC 62386) for

intelligent lighting solutions.

The DALI standard ensures full interoperability between any DALI light fixture manufacturers product or any DALI ballast or LED driver product.

Today this interoperability does not apply to components such as sensors, switches or scene-plates based on the DALI communications protocol. All such products are entirely proprietary and specific to their manufacturers' entire controls solution.

The DALI Standards organisation are working to address this issue.



Tridium's Niagara Framework® is a global convergent open web smart IoT technology that seamlessly enables

the commissioning, control, management, visualisation and analytics of disparate networked control devices in a web environment.

This Framework can exist on many Original Equipment Manufacturers (OEM) hardware controls platforms. Such controllers allow a System Integrator to connect many different types of smart automation and control technologies inside one hardware platform, thus creating smart IoT converged building & lighting controls edge devices.

Such building Management and Control platforms are available from 100's of manufacturers and vendors and delivered by 1,000's of SI companies globally.

The above is all that is required to directly connect DALI light fixture networks to smart IoT Building Management and Control multi-vendor platforms that use Tridium's Niagara Framework®, and be delivered, operated and maintained by suitably qualified Niagara System Integrators (SI).



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The addition of CNS's **elite**dali licenced Niagara software to any suitable controller running Tridium's Niagara Framework transforms these controllers into DALI

lighting commissioning, control, management, visualisation and analytics platforms for intelligent lighting.

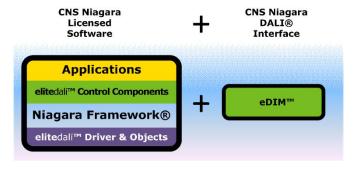
The combination of this **elite**dali Niagara software and a DALI option card/interface for Niagara platforms forms the core of an **elite**dali Multidrop Connectivity Kit. This is part of CNS's Niagara DALI lighting commissioning, control, maintenance and management products and solutions which comprise:-

- Licensed **elite**dali Multidrop Connectivity Kit for Niagara AX & N4, (for details see elitedali Connectivity Kit datasheets), for Niagara AX version <u>click here</u> and for N4 version click here to access.
- Compatible DALI input control hardware, <u>click here</u> for more details.
- DALI Power Supplies, <u>click here</u> for more details.
- DALI network devices, <u>click here</u> for more details.
- DALI relay units, <u>click here</u> for more details.

For more details on the entire **elite**dali product and solution range visit **www.elitedali.com**.

elitedali Multidrop Connectivity Kit Concept

The **elite**dali Multidrop Connectivity kit transforms suitable control platforms running the Niagara Framework to seamlessly connect to DALI networks directly available RS-485 serial ports and comprises:-





*elitedali strictly conforms to the current published DALI Open standard



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Key Features

Each licensed elitedali Multidrop Connectivity Kit enables -

- The connection of a single DALI channel, circuit or network of up to 64 DALI® devices
- Seamless connectivity between any suitable Niagara platform and DALI
- Full real-time Commissioning, Control, Maintenance, Management and Analytics of DALI networks and devices that conform to the open DALI standard from within Niagara.
- ♦ Up to 4 x elitedali Multidrop Connectivity Kits and therefore 4 x DALI lighting networks to be connected per single RS-485 JACE serial port*
- Up to 24 x DALI networks can be physically connected to a single JACE*
- Potential maximum of 1,536 open standard DALI devices manageable by a single JACE*
- ♦ Expandable across multiple JACES for large scale DALI lighting networks

*NB: Subject to available bandwidth and resources on the chosen Niagara N4 platform.

WARNING: elitedali must only be installed and commissioned by suitably qualified Engineers and Technicians for more information on how to become a Certified elitedali Partner (CeP™) visit www.elitedali.com.



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Benefits of Niagara Lighting Controllers with elitedali

Lower cost of installation, operation, maintenance -

Less hardware, leveraging N4 platform lower costs, better utilisation & ROI

Simpler network architecture -

Less to go wrong

Easier & faster to commission -

Familiar Niagara environment, tools and methods, highly automated, easier to support and maintain, NO mapping, labelling or enumeration checking required, full DALI device addressing capability supported

Future Proof -

Open standards based, highly vendor independent, multiple suppliers & installers Globally

Total Integration -

Seamless native Niagara DALI solution guaranteeing total integration with all other sub-systems connected to the Niagara Framework, offering better user experience, lower energy costs and less equipment

Seamless access to real-time data -

Enables complete control and management of assets in real-time both locally and remotely via smart mobile and cloud based tools



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