



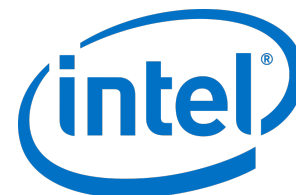
BubblyNet.®

human-centric building control



BubblyNet is a **smart building open platform** which delivers wellbeing and sustainability by controlling all functions of the building such as lighting, shades, air quality and sound masking.



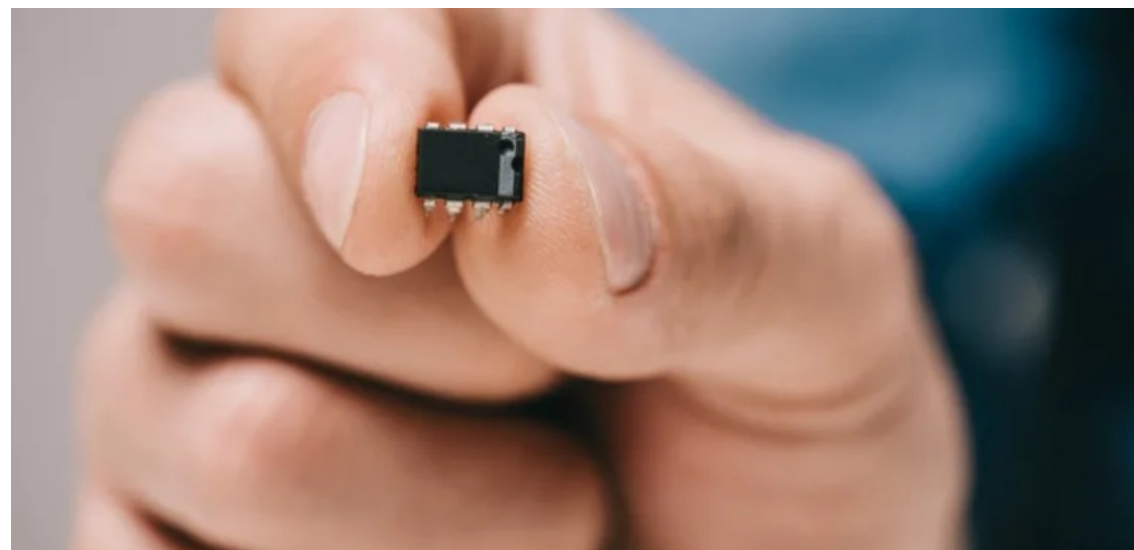


It is based on open protocol **Bluetooth Mesh/NLC**, the world's #1 low-power wireless standard.





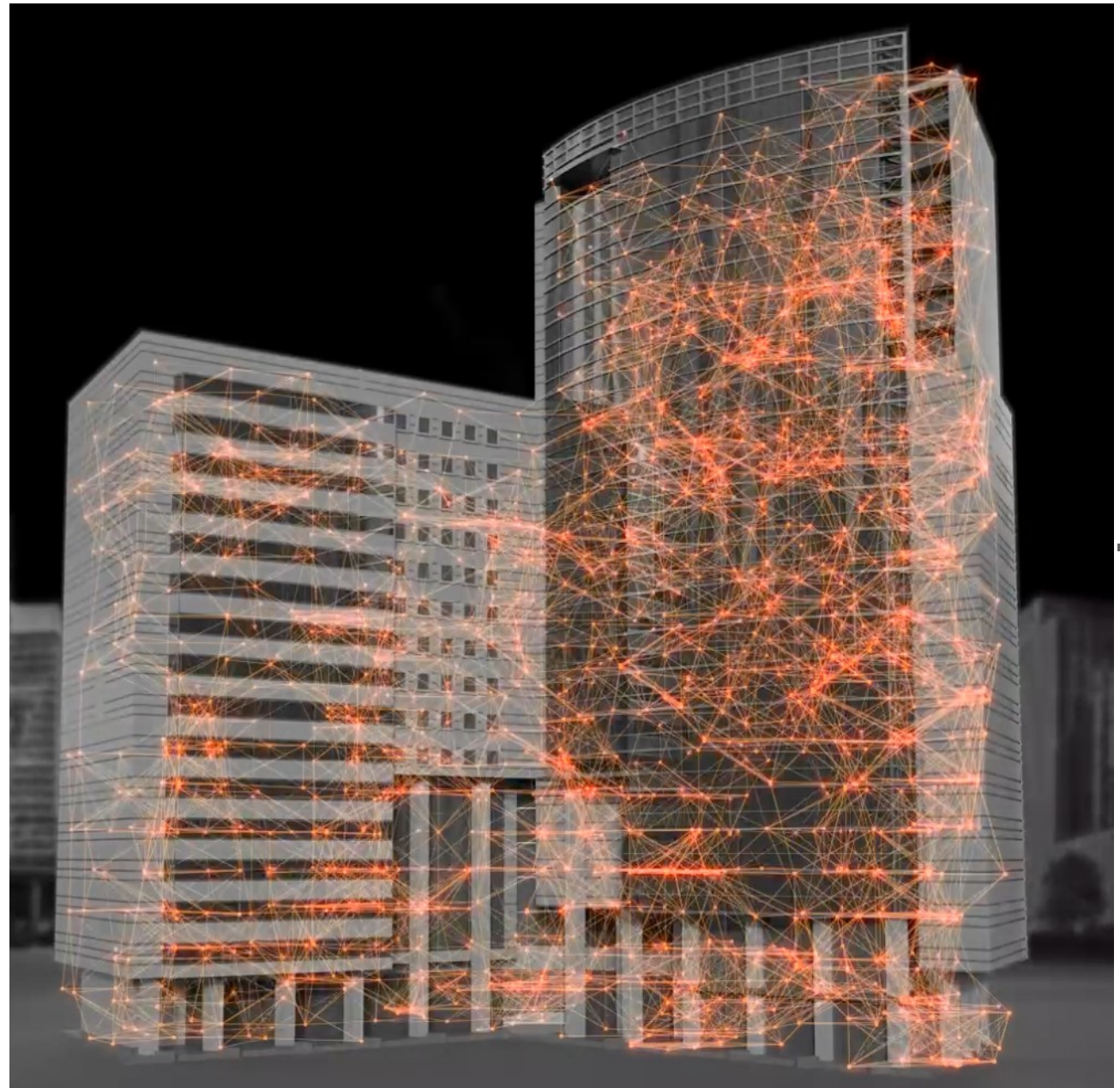
By embedding a tiny, but powerful, Bluetooth microchip in every device (driver, controller, sensor, and switch), devices become intelligent and self-sufficient.



Every device has all the software instructions (as groups, clock, schedules, scenes, transitions) it needs to operate autonomously or in coordination with other devices.



Devices, re-broadcasting messages, create a Mesh network which eliminates the need for control infrastructure even for very large projects.



# Simplification

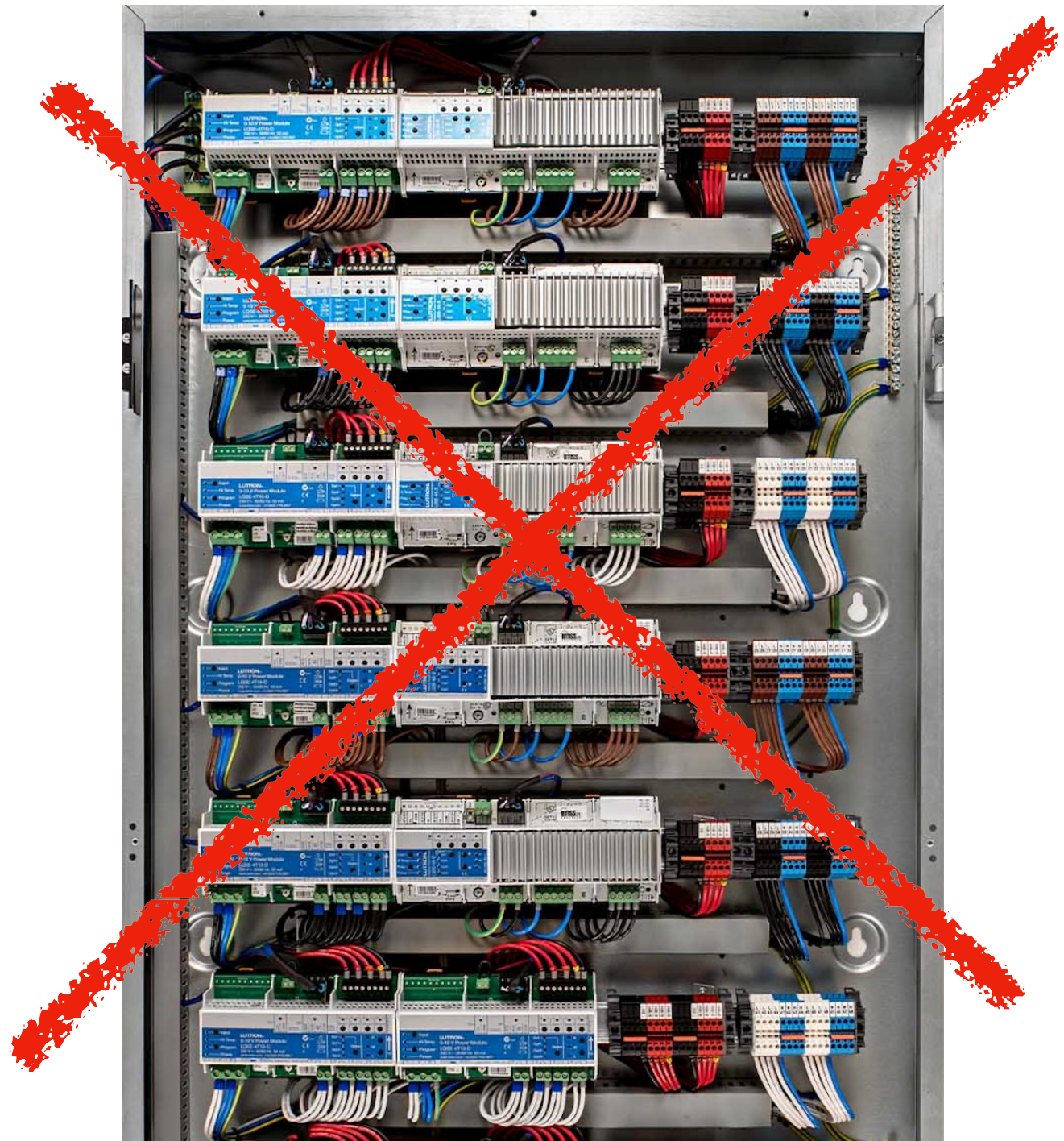
A Bluetooth Mesh network doesn't require control cables resulting in substantial labor savings.





# Simplification

A Bluetooth Mesh network doesn't require additional control hardware. The design of the system is quick and simple and the BOM substantially reduced.





## Simplification

A Bluetooth Mesh network doesn't require hubs and similar single-point-of-failure.



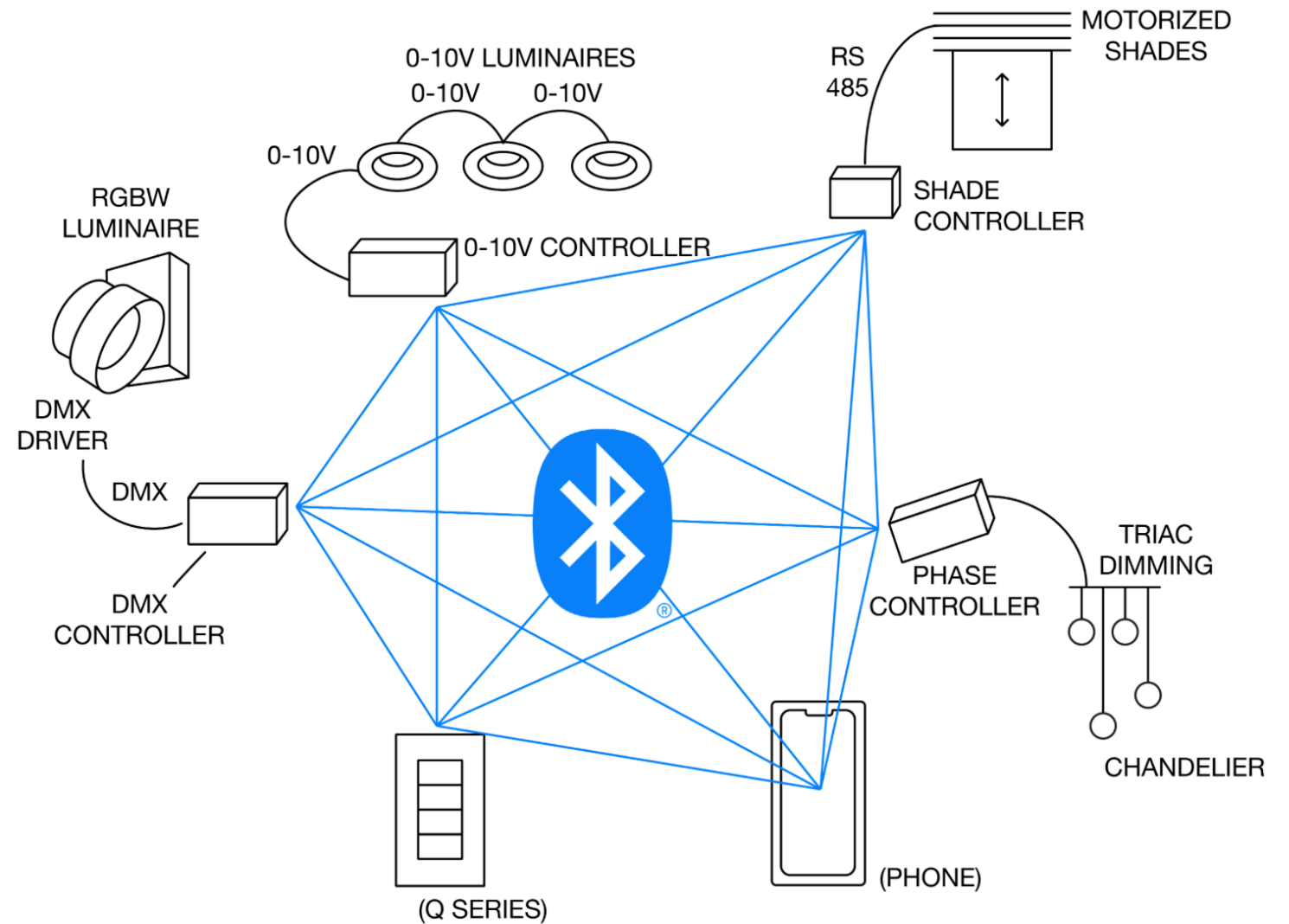
Nor does it require Internet or WiFi to operate.



# Controllers

Any load can be controlled, either single addressing luminaires as well as per zones:

- 0-10V 1 channel & 2 channels
- Forward Phase
- Reverse Phase
- Shades
- DMX
- DALI
- Sensors
- Beam Shaper
- Dry Contact



# Drivers

On-board drivers can also be used:

- Constant current 1 channel
- Constant current 2 channels
- Constant current 4 channels
- Constant voltage 1 channel
- Constant voltage 2 channels
- Constant voltage 4 channels





# Sensors

A wide variety of sensors are available:

- Low voltage/line voltage
- Battery powered
- PIR
- Dual Tech
- On-board luminaires
- Ceiling recessed/surface
- Wall mounted
- Track mounted
- High bay/low bay
- Daylight
- CO<sub>2</sub>
- Contact sensor



# Switches

Switches can be wired as well as battery powered



# Touchscreens



Touchscreens can be local-only as well as cloud-connected

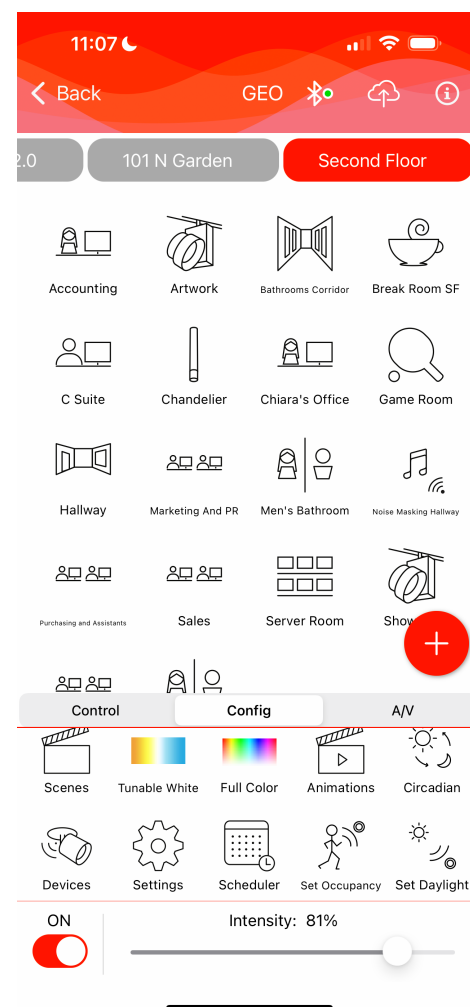




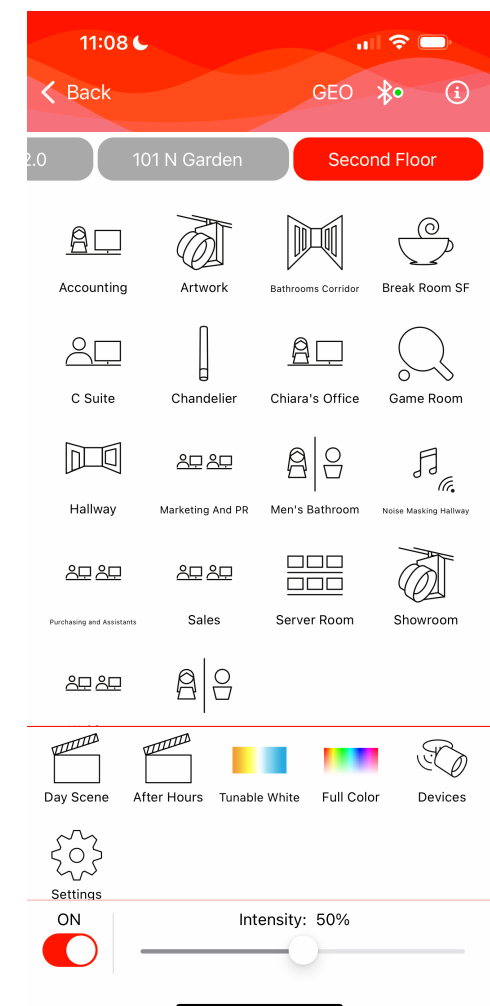
# App

The App is very simple to use and available for Android and iPhone.

It can be used by the contractor to commission the job



as well as by the end-user to control the network



# Integration

Integration with HVAC, BMS and other systems is possible through:

- Dry contact;
- RS485;
- DMX;
- BACnet over IP;
- Local APIs;
- Cloud APIs.



# Cloud services

A full set of cloud services are available by adding a Gateway or a G-series Touchscreen to the project:

- Remote control;
- User Management;
- Site map visualization & control;
- Touchscreen configuration;
- Notifications & network health control;
- Multi-site aggregation.







## Easy to scale for large projects

**Supernus Pharmaceuticals - Rockville, MD.**      120,000 sq.ft, 1,500 BubblyNet devices





## Professional settings for high-end lighting design

**Ammoora** - Baltimore, MD      Variety of loads and dimming protocols





## Cloud connectivity for Multi-site projects

**Turtle Bay Resort - Kahuku, HI**      7 buildings, 1,200 BubblyNet devices





## Air-gap encrypted networks for federal buildings

**SeaTac Airport** - Seattle, WA      High security requirements







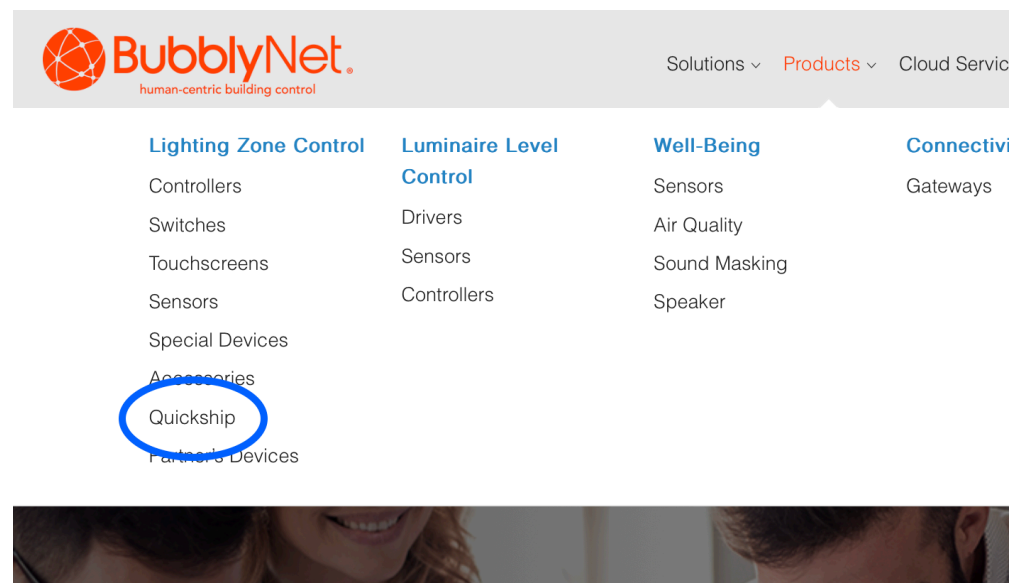
## Award winning innovation for complex lighting

**Irving Convention Center - Irving, TX**      DMX multivendor integration











# Deliveries

On-line Quick-Ship inventory for 5 business days delivery.



The image shows a screenshot of the BubblyNet website's navigation menu. The menu is organized into four main categories: Lighting Zone Control, Luminaire Level Control, Well-Being, and Connectivity. Under Lighting Zone Control, there are links for Controllers, Switches, Touchscreens, Sensors, Special Devices, Accessories, Quickship (highlighted with a red circle), and Partner's Devices. Under Luminaire Level Control, there are links for Drivers, Sensors, and Controllers. Under Well-Being, there are links for Sensors, Air Quality, Sound Masking, and Speaker. Under Connectivity, there is a link for Gateways. The BubblyNet logo and tagline 'human-centric building control' are at the top left. Navigation links for Solutions, Products, and Cloud Service are at the top right.

 <p><b>20A Load Controller 0-10V / Plug Load ( C-T20) C-T20-17-DJ00</b> The C-T20-17-DJ00 Load Controller is a wireless module that controls via Bluetooth any ON/OFF load up to 20 Amps. It can be installed outside of J-boxes through the standard opening according to electrical codes.</p> <p>Option: Controller, Stock: 255</p> <p><b>ORDER NOW</b></p>	 <p><b>CC 36W AC/DC 2CH Tunable White Driver (D-B1K) D-B1K-30-42-17-D000</b> The Tunable White driver is a wireless device that controls via Bluetooth a Tunable White fixture and does not require the use of a gateway.</p> <p>Option: Driver, Stock: 169</p> <p><b>ORDER NOW</b></p>	 <p><b>CC 26W AC/DC 2CH Tunable White Driver D-B70-30-42-17-D000</b> The BubblyNet Drivers are the ideal solution for standalone projects as well as the backbone of complex Mesh Networks. Like two drivers in one, this dual-channel driver is programmable from 100mA up to 700mA and used for Tunable White applications. Please contact BubblyNet Sales for optional housing and pricing.</p> <p>Option: Driver, Stock: 68</p> <p><b>ORDER NOW</b></p>	 <p><b>1000mA Bluetooth Mesh Constant Current LED Driverr (D-C1K) D-C1K-30-42-17-DL00</b> The D-C1K-30-42-17-DL00 drivers are the ideal solution for standalone projects as well as the backbone of complex Mesh Networks. The driver is programmable from 100mA up to 1000mA. Please contact BubblyNet Sales for more information</p> <p>Option: Driver, Stock: 106</p> <p><b>ORDER NOW</b></p>
 <p><b>CV 96W AC/DC 2CH Tunable White Driver (D-D4K) D-D4K-00-24-17-DL00</b> The drivers are the ideal solution for standalone projects as well as the backbone of complex Mesh Networks. Like two drivers in one, this dual channel driver is used for Tunable White applications.</p> <p>Option: Driver, Stock: 282</p>	 <p><b>CC 40W AC/DC 4CH RGBW Driver D-F70-07-20-24-D000</b> The D-F70-07-20-24-D000 Constant Current drivers are the ideal solution for standalone projects as well as the backbone of complex Mesh Networks. Like four drivers in one, this quad channel driver is programmable up to 700mA and used for RGBW applications.</p> <p>Option: Driver, Stock: 162</p>	 <p><b>CV 96W DC/DC 4CH RGBW Driver D-G4K-00-24-24-DL00</b> The D-G4K-00-24-24-DL00 Four Channel drivers are the ideal solution for standalone projects as well as the backbone of complex mesh networks. Use this driver for all constant voltage RGBW applications like LED strips, LED panels, linear fixtures for up to 96W.</p> <p>Option: Driver, Stock: 289</p>	 <p><b>CC 20W AC/DC 1,000mA Max Driver (D-C11) D-C11-03-18-17-D000</b> The driver is a wireless module that controls via Bluetooth any LED fixture into a smart wireless device and does not require the use of a gateway. These drivers are the ideal solution for standalone projects as well as the backbone of complex Mesh Networks. The driver is available from 100mA up to 1,000mA. Please contact BubblyNet Sales about optional housing and additional pricing.</p> <p>Option: Driver, Stock: 307</p>

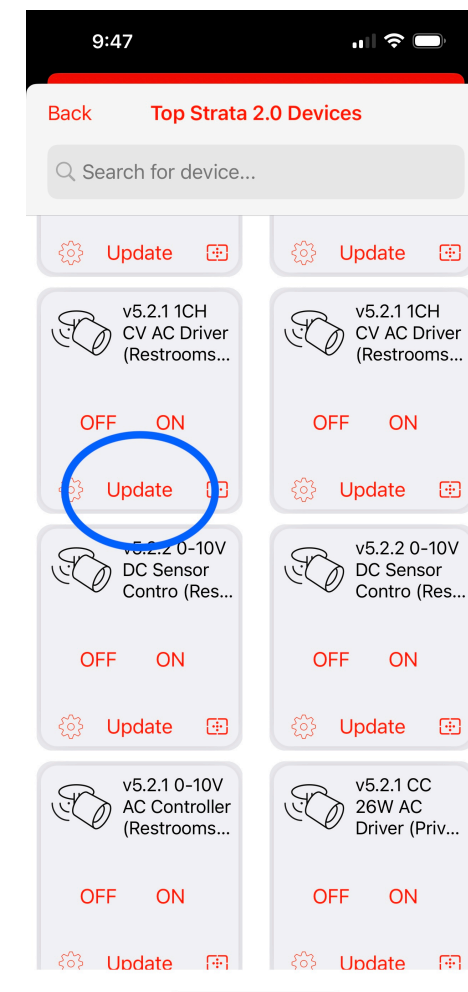
Standard delivery is 4 weeks.

# Warranty

Hardware failure rate is: 0.3%

Standard warranty is 2 years with optional 5 years.

Software can be updated over-the-air.







Thank you