ZUMTOBEL

Technology Partner
SILVAIR

bmLINK

INTELLIGENT LINKING

THE KEY
TO WIRELESS CONTROL.

CRAFT
bmLINK
An intelligent powerhouse

CRAFT
bmLINK SENS
An all-rounder for high rooms

TECTON
bmLINK
Trunking with wireless communication

AMPHIBIA
bmLINK
Higher degree of protection for wireless communication

bmLINK

WIRELESS.
UNCOMPLICATED.
FUTURE-PROOF.

WHY bmLINK?

Technically complicated, costly or simply not yet complete? No matter why a control line is missing, bmLINK is a clever solution to installation problems. Without cables, but with high levels of compatibility as part of new and existing systems. When it comes to CRAFT and TECTON, bmLINK is even integrated into the luminaires at the manufacturing stage.

WHAT IS bmLINK?

bmLINK is a wireless solution for DALI systems like LITECOM, forming a bridge between classical DALI control devices and luminaires or the latest sensors with DALI ports. bmLINK takes advantage of the latest innovations with future-proof standards, harnessing cutting-edge technology like Bluetooth® Mesh, which automatically forwards signals to adjacent devices. This significantly increases both the range and the reliability of wireless communication.

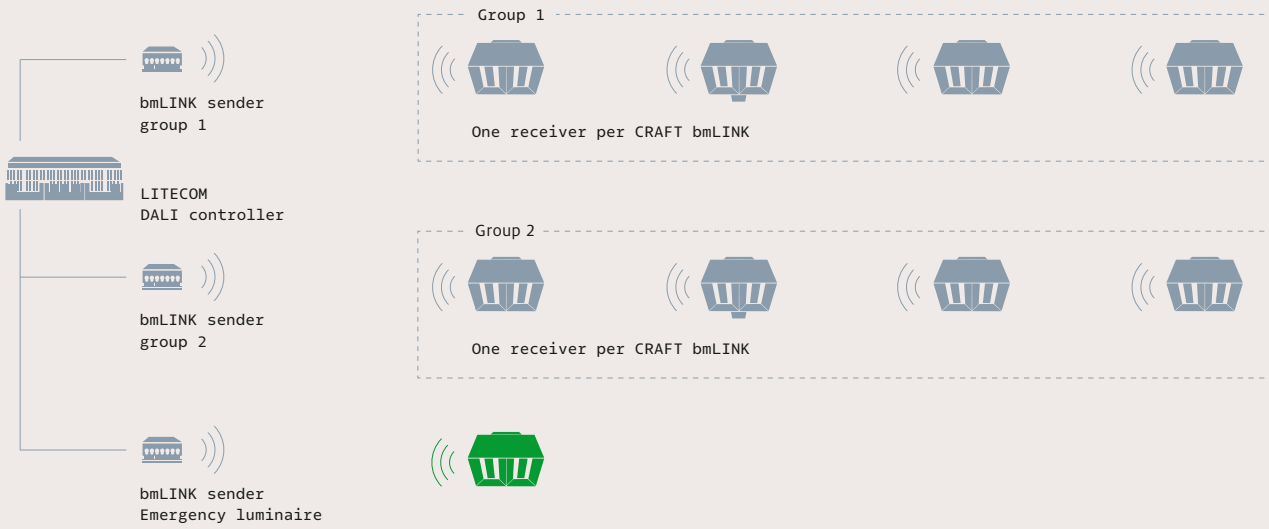
bmLINK MINI
Sender and receiver

bmLINK
Sender and receiver with integrated DALI supply

CENTRAL CONTROL FUNCTION

VIA WIRELESS TO THE CENTRAL KEY COMPONENT.

A luminaire with bmLINK can be remotely connected to a central LITECOM system. The luminaire and sensor data is sent to a central LITECOM control unit via a bmLINK sender module. Self-contained emergency luminaires can also be monitored remotely by using a bmLINK transmitter and bmLINK receiver. bmLINK can handle both the standard DALI commands and tunableWhite.



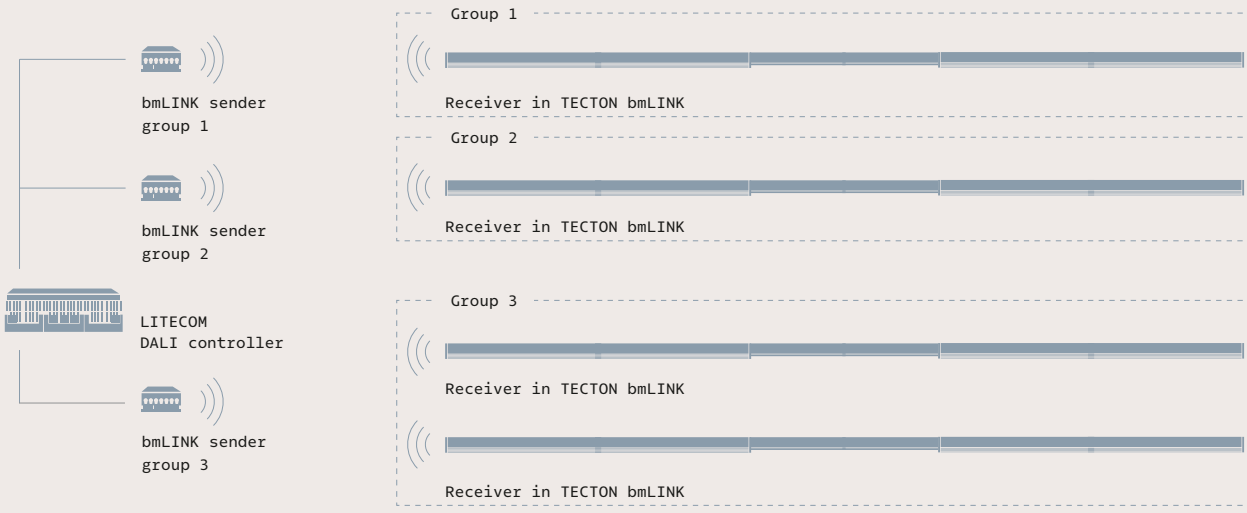
Power and intelligence meet at the highest level: A bmLINK transmitter simultaneously controls all CRAFT luminaires in an assigned group, which may also include an emergency luminaire that is monitored by LITECOM. In return, the collected sensor data is transmitted to the controller. Emergency luminaires can also be monitored by a single bmLINK sender using LITECOM.

BLUETHOOTH® MESH.

ABSOLUTELY SECURE.
NOW AND IN FUTURE.

QUALIFIED BLUETOOTH® MESH

Just like DALI, Bluetooth® is a standardised protocol. Bluetooth® Mesh is writing a new chapter in the world of building automation and control, offering coverage that perfectly meets the requirements of modern lighting design. Bluetooth® Mesh enables signals to be relayed to the correct receiver via multiple subscribers, providing consistently high levels of network stability. All data is always protected through encryption and authentication.



TECTON can now be accessed via Bluetooth®. A bmLINK sender wirelessly integrates one or more continuous rows in the DALI controller. For intelligently optimised light and maximum energy savings, it is also possible to integrate a multi-sensor for constant light regulation and motion detection.

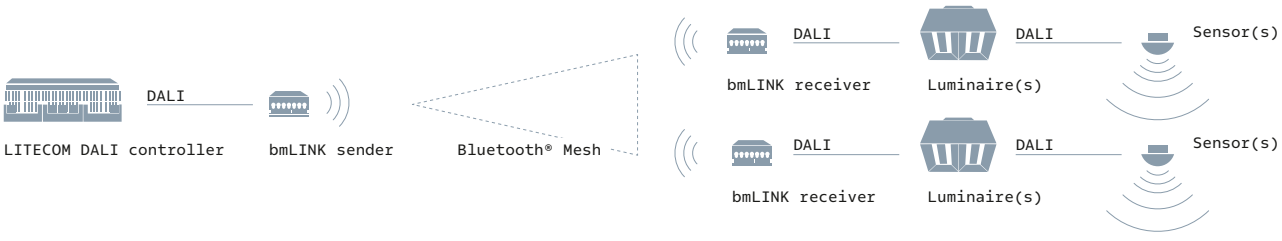
PLANNING NOTES CENTRAL CONTROL

BENEFIT FROM THE STRENGTHS OF LITECOM.

A bmLINK transmitter acts as a DALI subscriber and transmits the signal via Bluetooth® Mesh to individual or grouped bmLINK receivers. All receivers assigned to a transmitter receive the control commands simultaneously. They forward these commands to one or more DALI luminaires using a broadcast signal. This allows simple DALI luminaires and DALI tunableWhite luminaires to be controlled. Only the bmLINK transmitters are commissioned via DALI. The bmLINK receivers linked via APP do not require further DALI addressing, as they do not appear individually in the DALI system.

One self-contained safety luminaire per bmLINK transmitter can be connected, and monitored by LITECOM.

Sensor data and luminaire errors are relayed back to the DALI controller as a sum signal via the transmitter. Sensors connected to the receiver are grouped into a motion or light sensor by the transmitter.



Cantina-Borgoluce Susegana | IT

WIRELESS PLANNING NOTES

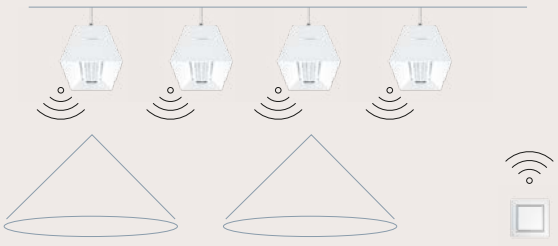
The line of sight between the wireless modules should be as clear as possible. The wireless signal will be weakened if the sender and the receiver are too far apart. On-site equipment can also have an influence on the signal. Intermediate ceilings with panels made of metal or carbon fibre, larger intermediate objects made of steel, glass or with metal coating as well as metal surfaces, fire protection walls, lift shafts, stairwells and service areas lead to a loss of wireless communication.

LOCAL CONTROL FUNCTION

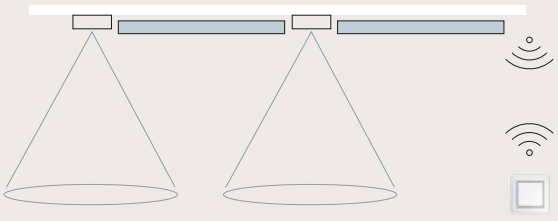
bmLINK AND SENSORS
FOR ZONE-BASED LIGHTING.

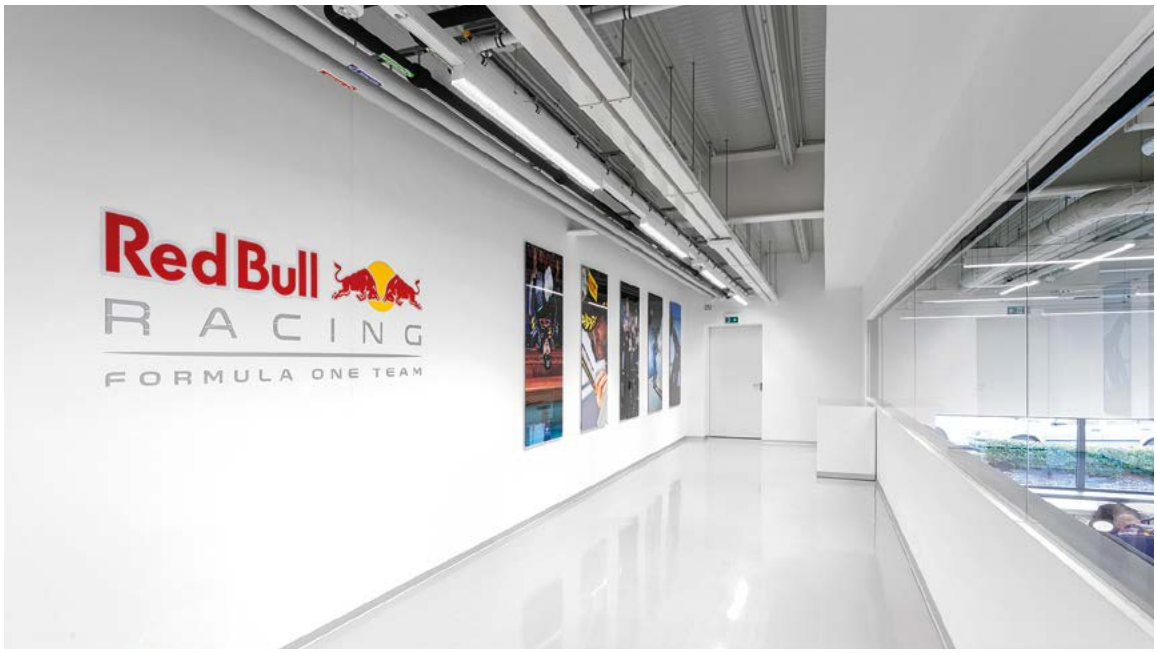
The integrated bmLINK module controls the luminaire based on motion and light levels. Nearby luminaires can be integrated into the same wireless zone. A battery powered wireless switch is also available as an option for operation. If a sensor reports motion, the entire zone is set to the pre-defined levels. With CRAFT and TECTON, a light sensor can be chosen as a reference sensor for constant light regulation. With AMPHIBIA, the motion sensor is fully integrated, which gives it a higher degree of protection.
Commissioning is easy via the iOS APP on a mobile device.

Example of CRAFT:



Example of TECTON:

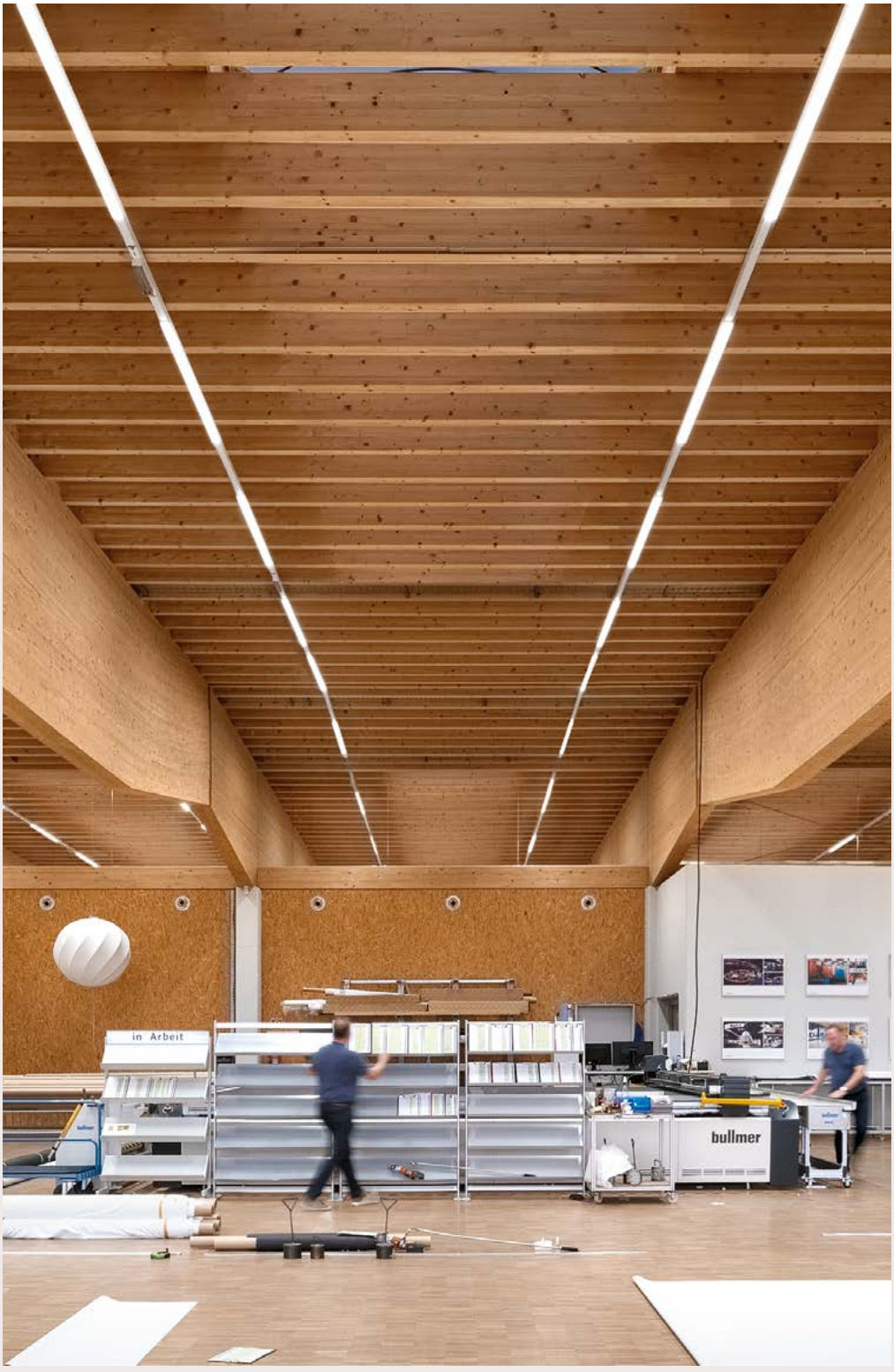




Aston Martin RedBull Racing | UK

Range receiver - receiver sender - receiver wireless switch - receiver	bmLINK without additional housing or obstruction: up to 20 m bmLINK in luminaire or plastic housing: up to 15 m
Frequency	2.4 GHz
Maximum transmission power	+4 dBm
Simensions	bmLINK: 119 x 30 x 21 mm bmLINK mini: 47.4 x 28.2 x 14.6 mm
Integrated DALI supply	bmLINK: 25 loads bmLINK mini: none
Degree of protection	IP20
Ambient temperature	bmLINK: -20 °C bis +60 °C bmLINK mini: 0 °C bis +60 °C
Sensors	Tridonic MSensoren G3 MSENS Tecton ED-SENS mini ED-1AWSD Interface
Commissioning	bmLINK tool (Apple APP Store)
Max. number of bmLINK devices per BLE Mesh network	1000
Max. number of sensors per BLE Mesh network	250
Function central control: Max. number of bmLINK senders per BLE Mesh network that simultaneously transmit control signals, e.g. central on/off commands	16
Max. number of self-contained safety luminaires per bmLINK transmitter/receiver	1
Function central control: Max. number of senders per BLE Mesh network - for time-delayed switching	No limit

By means of an adjustable function profile, the bmLINK receiver module assumes the function of a DALI control device. All bmLINK receiver modules in the same wireless zone control the luminaires on the basis of the profile that has been set.



PLANNING NOTES LOCAL CONTROL

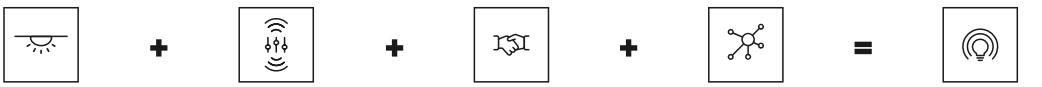
SIMPLE CONTROL,
INDIVIDUAL PROFILES.

THE FOLLOWING CONTROL PROFILES ARE AVAILABLE FOR SELECTION:

Manual control	ON/OFF control via wireless switch
Occupancy sensing	All luminaires switch ON when motion is detected and OFF when none is detected
Vacancy sensing	ON using wireless switch, OFF when sensor detects absence
Occupancy sensing with daylight harvesting	ON/OFF using motion detection, light regulation depending on the brightness of the surroundings
Vacancy sensing with daylight harvesting	ON using wireless switch, OFF in the event of absence, light regulation depending on the brightness of the surroundings
Multiple scenes	Four different, static lighting scenes can be defined and activated using four momentary switches

If there is more than one motion sensor per zone, as soon as one sensor detects motion, the entire zone is activated. Only one light sensor per zone can be selected as a reference sensor. For each bmLINK receiver one wireless switch can be linked. For each control profile it is possible to override manually with the wireless switch. By using connected sensors (motion or combined motion and light sensors), connected luminaires are controlled according to motion and/or ambient light. bmLINK modules can be set up or operated using a free iOS APP. Several bmLINK modules can be assigned to a virtual “zone”. The same function profile applies to all bmLINK modules assigned to this zone.

T H E L I G H T



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