Whitecroft
lighting

Organic
Response

Wireless Controls
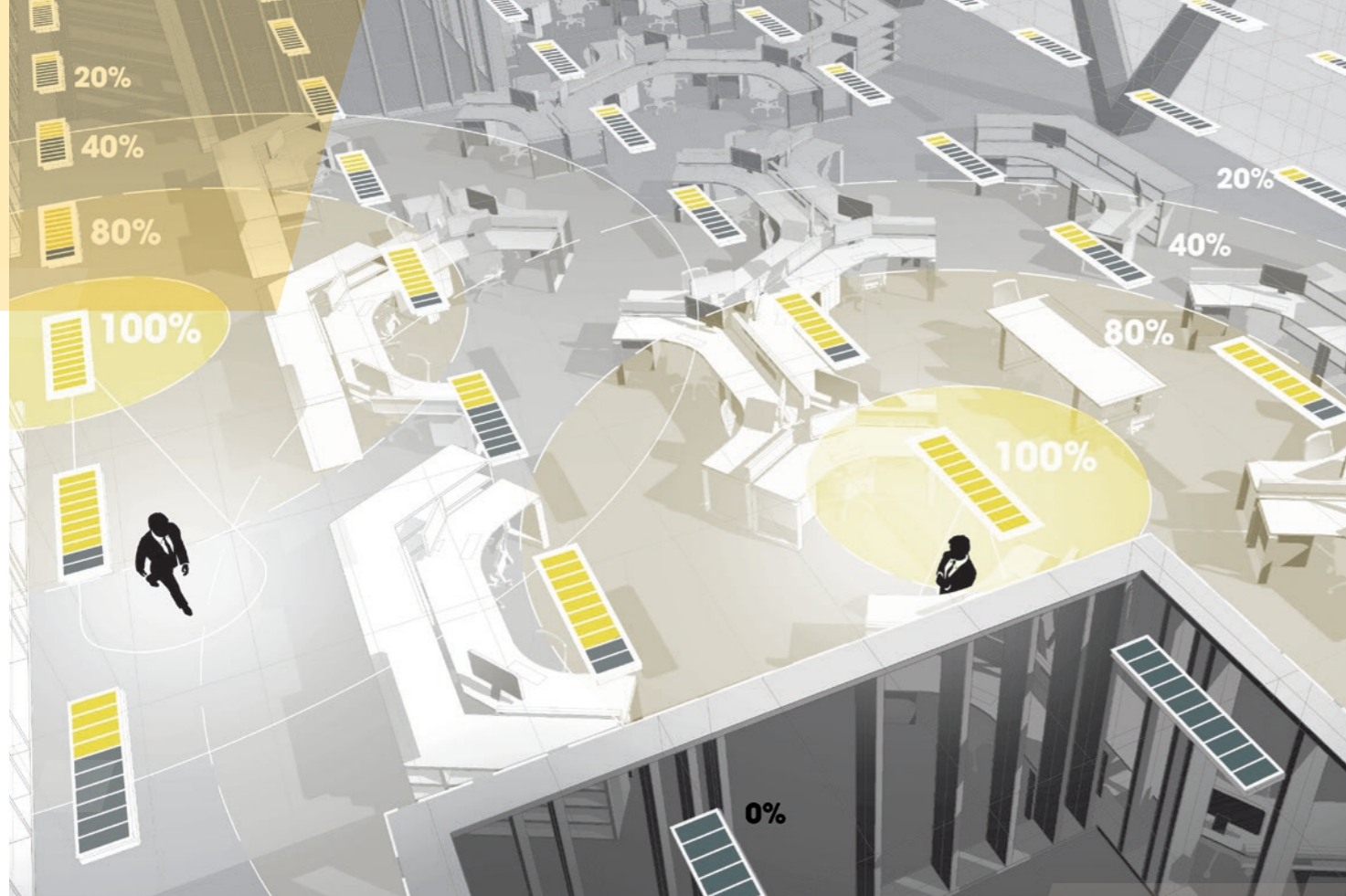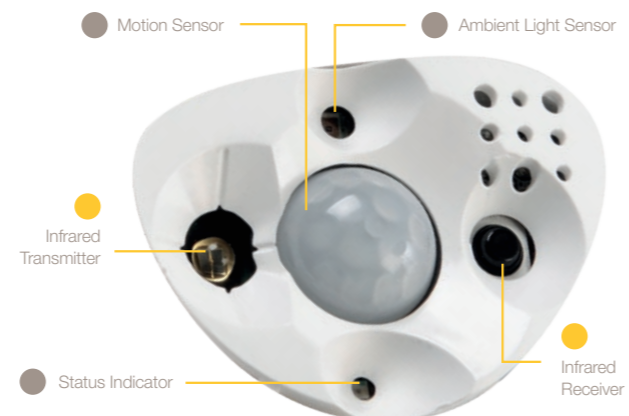
organic response

When movement is detected a signal is relayed via infrared to other Organic Response® luminaires in the area.

Organic Response®

Organic Response® uses an innovative Proximity Limited Communication system that reacts to occupancy and daylight sensed by a single luminaire detector and then transmits data to nearby luminaires. Those luminaires then communicate with their nearby luminaires creating a cascade effect across a building.

The detector is integrated into every luminaire and includes an infrared transmitter and receiver to create the send and receive signal for the building wide wireless communications. As the infrared signal can only travel 3 metres, every luminaire installed can only communicate with their neighbour, eliminating the need for onsite location commissioning.

The patented Proximity Limited Communication system will react to complex occupancy patterns and modify its behaviour as the building use changes.

Motion Sensor

Ambient Light Sensor

Infrared Transmitter

Status Indicator

Infrared Receiver

The infrared transmitter and receiver in Organic Response detectors delivers a unique Proximity Limited Communication system

Commonly used detectors have functionality for occupancy and daylight sensing

SIMPLE FUNCTIONALITY

– Does not need additional controls wiring or on site commissioning.

– Functionality can be optimised via a phone or tablet based app.

– Can be linked to the cloud or Building Management System for high level functionality.

One sensor node, unlimited flexibility

Immediately accessible through a simple smartphone app, Tiers 1– 3 for system Optimisation and Configuration are included as standard.
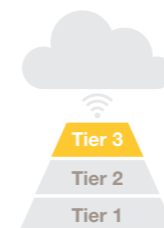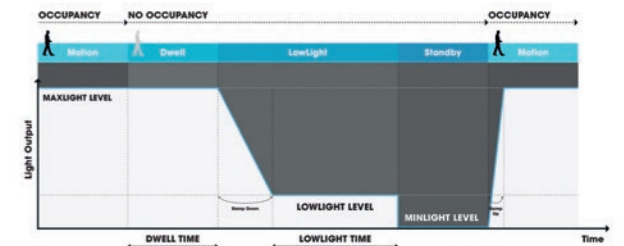
Tier 1

1. Instant Functionality

– Default operation delivers Proximity Limited Communication

– No need for expert commissioning services

– It just works!

Tier 2
Tier 1

2. Optimisation

Increase energy savings and improve occupancy comfort:

– Adjust light levels and dwell times

– Change lighting "Personalities"

– Activate daylight dimming

Tier 3
Tier 2
Tier 1

3. Configuration

Customise lighting behaviour for even more flexibility:

– Independent and dependent zones

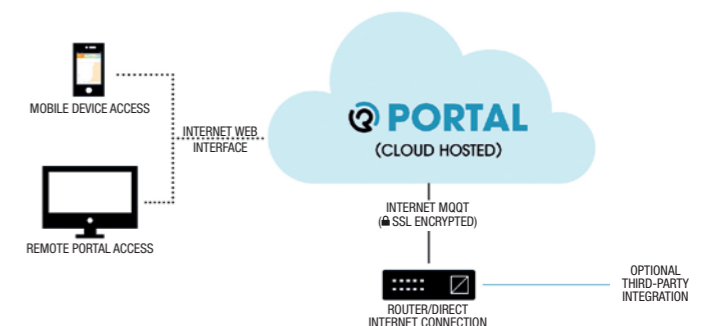– Create customised scenes for example in meeting rooms and for presentations
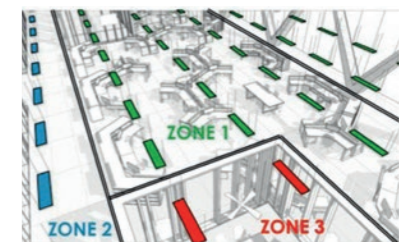
For more sophisticated interaction, an upgrade to Tier 4 delivers on the promise of the smart lighting revolution, where buildings start to adapt to their changing environment and the needs of their occupants.

Tier 4
Tier 3
Tier 2
Tier 1
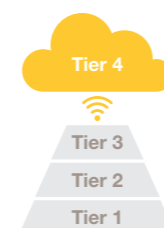
4. Connected Systems

– Connection via a mobile phone or smart device

– Automatic emergency testing and centralised error reporting

– Extract and analyse building data such as energy consumption and occupancy patterns

– Access valuable data for building use and entry into the Building Management System via the Organic Response cloud

MOBILE DEVICE ACCESS

INTERNET WEB INTERFACE

PORTAL (CLOUD HOSTED)

REMOTE PORTAL ACCESS

INTERNET MQQT (SSL ENCRYPTED)

ROUTER/DIRECT INTERNET CONNECTION

OPTIONAL THIRD-PARTY INTEGRATION

Organic Response® features that benefit all

Whatever your role, whatever sector you work in, Organic Response® has features that will benefit you and your organisation.

Consultants

– Easy to design and implement on drawings, technology is fitted into each luminaire in the factory eliminating the need for room based sensors and separate lighting control design.

– Works instantaneously so configuration and optimisation can be done quickly and simply via the app using a smartphone fitted with an infrared dongle.

– No luminaire is ever on when it doesn't need to be helping to reduce energy costs through lower power consumption.

Installers

– No more costly than a DALI integrated control system, yet much simpler and faster to install.

– Reduce project risk and opportunity for project schedule disruption. No or minimal commissioning, fully operational without any third party intervention.

– 3 wire (live, neutral, earth) installation simplifies new build installation and lighting control addition on refurbishment projects.

End Users

– Choose from 12 pre-loaded Personalities for the ultimate balance between occupancy, comfort, safety and energy efficiency at no extra cost.

– Integration with building management systems and a web based user interface offers further improvements to building efficiency and extended asset life.

– No need for expensive and disruptive commissioning or re-commissioning during life as the system intuitively adapts to users needs.

For further information on Organic Response® visit our website.

Organic Response® in action

Commercial Offices

Achieve lower operating costs, an improved working environment and enhanced safety and security.

– Lighting responds to occupancy using different parameters of light levels throughout the building.

– Accommodate minor or major churn, the sensor node-to-node communication quickly responds to design layout and use of space changes.

– Optimise the basic settings or configure for more sophisticated behaviours in house via a smartphone app.

Healthcare

Reducing energy costs in any 24/7 operation can be challenging, autonomous operation across multiple spaces offers significant opportunity for savings.

– Clever features such as "Min Light" deliver low energy minimum light levels for assured occupant safety and patient comfort.

– Modify delay times according to the space so that no luminaire is on when it doesn't need to be once no occupancy is detected.

– Sensor nodes integrated into the luminaire reduce ceiling clutter and maintain a clean aesthetic.

Education

Delivering low energy consumption, cost savings and a well-lit, productive learning environment.

– Monitor ambient light levels as well as occupancy, available daylight is maximised and unwanted light reduced.

– Pre-stored lighting behaviours accommodate variable teaching conditions, for ease of use the system is operated via wireless wall plate.

– Eliminate blind spots with a sensor in each luminaire delivering full detection coverage across the space.

Create agile, flexible and engaging spaces with Organic Response®

Start up mode
Luminaires can be configured to enter a pre-set Scene on start-up. This can reduce power reticulation and generator load in power failure/emergency conditions.

← Number of light fittings from motion event →

MOTION EVENT

15··9··4 3 2 1   1 2 3 4··9··15

Light Output: 100% 80% 60% 40% 20%

CORRIDOR

EXTREME SAVER   OPEN FLOOR
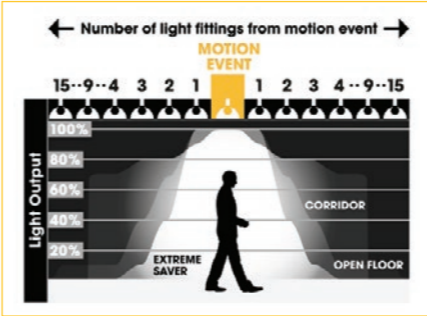
Personalities
A luminaire's response to occupancy can be configured using the "Personalities" feature. There are over a dozen pre-set Personalities, allowing you to find the ultimate balance between occupancy comfort and energy efficiency.

Daylight dimming
Daylight dimming can be activated to maximise energy savings in any area that is exposed to natural light – every Sensor Node has this capability.

Wall washing
Helps maintain vertical illumination on certain walls in large open plan offices (or highlight feature walls, pendants and other striking architectural features) while an occupant is anywhere on the floor, improving the look and feel of the space and occupancy comfort.

Corridor linking
Corridors can be linked to neighbouring zones using the smartphone app.

Zones
Allows adjacent areas to respond differently to occupancy. Zones can be entirely independent (e.g. separating the printer galley from the open plan), or interdependent (e.g. linking the open plan zone to the corridor zone). Handy for breakout areas, glass fronted offices, and meeting rooms.
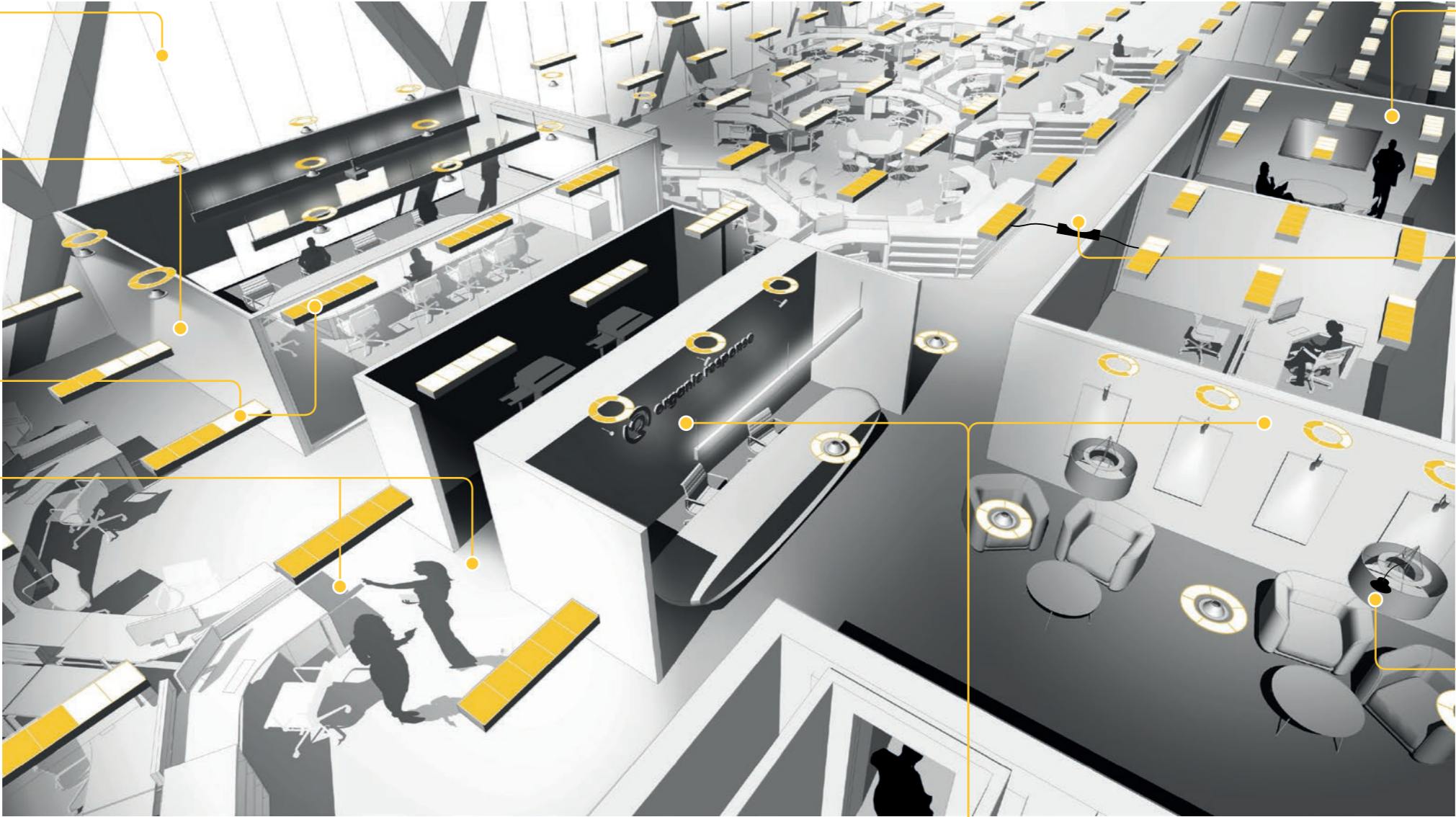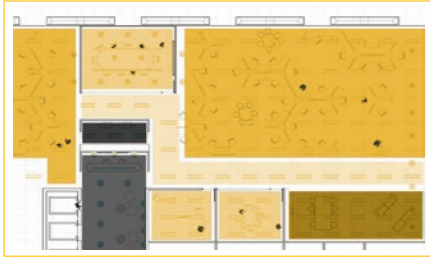
Scenes
A wireless Wall Plate allows for manual On/Off switching, dimming and scene control. It can be mounted anywhere within the space and moved simply and easily if working requirements change. Perfect for scene control in meeting rooms or anywhere that requires individual dimming control (e.g. closed office).

Sensor node link
Connects two physically isolated Sensor Nodes. Ideal for linking a closed office to a neighbouring corridor, so that the corridor remains on while the office is occupied. This ensures that a lone occupant exiting their office late at night is not confronted by darkness.

Detached sensor node housing
Used to control more than one luminaire, (e.g. down lights or spot lights). Also used to control luminaires which cannot accommodate Sensor Node integration (e.g. pendants)

The Organic Response® remote app
A simple, intuitive user interface for optimising the lighting control system within minutes with the press of a few buttons. All interaction with the system, including all the features highlighted in this diagram, is enabled using the app.

Night lighting/security lighting
Vacant reception areas or lobbies can have selected luminaires remain on permanently (at chosen light level), ensuring a welcoming environment for anyone entering the space, upon which the luminaires will intuitively brighten.

Creating connected spaces with the Organic Response® Portal platform

Organic Response®, using unique Proximity Limited Communication wireless technology can be customised as technology evolves to provide an interface with Building Management Systems and vital building information such as full analytics of the building operation from a web based portal.

Tier 4

Tier 3

Tier 2

Tier 1

MOBILE DEVICE ACCESS

INTERNET WEB INTERFACE

REMOTE PORTAL ACCESS

PORTAL
(CLOUD HOSTED)

INTERNET MQQT
(SSL ENCRYPTED)

ROUTER/DIRECT
INTERNET CONNECTION

OPTIONAL
THIRD-PARTY
INTEGRATION

INTERNET MQQT
(SSL ENCRYPTED)

GATEWAY

GATEWAY

WIREPAS
128-BIT AES
ENCRYPTED

DISTRIBUTED INTELLIGENCE
LIGHTING CONTROL VIA
INFRARED (OIC2)
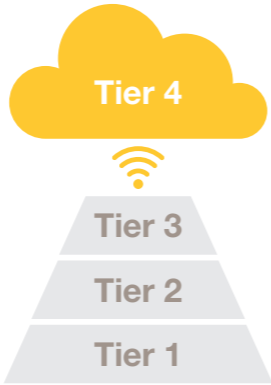
Occupancy Heat Mapping

Improve workspace utilisation in real time by mapping movement and occupancy within spaces. Reduce energy costs, improve flexibility, productivity and utilisation of spaces.

Energy Performance

Assess energy consumption by time of day, and day of week, and correlate with occupancy. Also compare energy consumption across functional areas/zones, to identify opportunities to trim light levels or dwell times.

Maintenance

Receive real time notification of luminaire location, usage, faulty fixtures, and status information about drivers and light source. Schedule and record emergency lighting central automatic testing in accordance with local standards to support the scheduling of predictive maintenance.

BMS Linkage

Data used in-conjunction with Building Management Systems will in the future contribute significantly to effective use of other services such as Heating and Ventilation, Blinds, Security, Space Management and overall maintenance programmes. Simple API's (Application Programme Interfaces) are being developed to provide seamless integration to existing Building Services Protocols such as BACnet, Modbus and LonWorks.
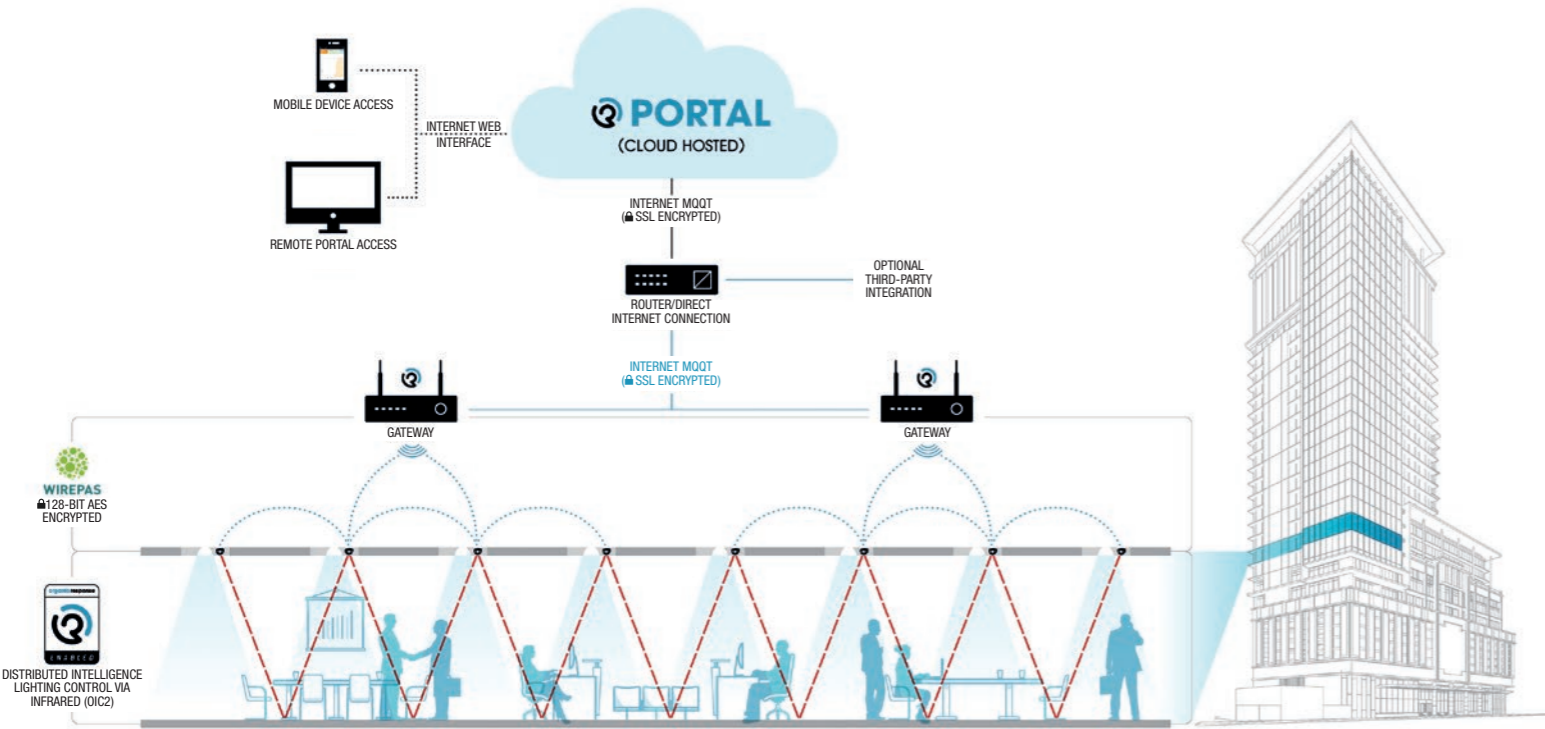
Organic Response® enabled luminaires

A wide range of recessed, suspended and surface mounted luminaries are available with integrated Organic Response® sensor nodes. These include:

Tegan Slim

DUO³

Cascade LED

Selene

Foil XS-Line

Remote Detector

Please contact your local Sales Engineer for further information on other ranges available.

Organic Response® sensor node

For applications requiring luminaires that are not available with integrated sensor nodes, a remote version is available that can control individual or groups of luminaires up to a maximum 6A of resistive load or 6 DALI ballasts.

Service and Support

We provide support as part of the cost of your Organic Response® Proximity Limited Communication system or if you need a hand getting your system set up and running we can also offer service levels with extra support options depending on the needs of your business.

Design In Services Included

– Design in support through the provision of photometric and BIM data.

– Factory integration of Organic Response® into a wide range of luminaires to help deliver both compliance and creativity.

– Creation of lighting designs, simply mount your Organic Response® luminaire according to the design.

Assurance of 12 month soft landing support post installation with two onsite follow up visits to ensure optimum system settings			
Direct onsite support, the space will be set up according to pre-defined zones and personalities			
Basic onsite installer demonstration and awareness training			
Support Options Included	**Bronze**	**Silver**	**Gold**
Organic Response® App	●	●	●
Organic Response® Dongle	●	●	●
Web Based Chat and Telephone Technical Support	●	●	●
Full Access to Design In Service	●	●	●
Basic Onsite Training	●	●	●
Zoned Level and Personality Drawings		●	●
On Site Set Up		●	●
On Site Follow Up Visits			●
Extended Plan by Negotiation			●

Diagram showing Organic Response® zoned personalities available with Silver and Gold packages

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