

Wireless control system shall be comprised of a wireless mesh network of luminaires. System shall be supplied with a Graphical User Interface and USB bridge node to wirelessly interface and configure the luminaires. The luminaires will form a mesh network (subject to spacings and site conditions) allowing user access to all luminaires from a single location.

Control system shall be capable of operating luminaire completely independently, without need for fixed external control equipment (routers, servers, access points, etc.). If required, luminaires can be shipped pre-commissioned from the factory - the only effort required in the field is to install in the correct locations and update the time and date wirelessly.

Note that the PC-based GUI and bridge node are ONLY needed for user interface to the luminaires (e.g. adjusting settings, etc.). At all other times, luminaires will operate independently. Each luminaire shall have an internal RTC (real time clock) to support independent operation. RTC shall be backed with a solid state battery, providing backup power for at least four days with AC power disconnected.

For security purposes, system shall not be capable of Internet connectivity. To allow for segregation of proximate networks, control system shall support use of 16 channels at 2.4 Ghz, and support use of encryption.

Luminaires shall offer optional PIR motion sensors integrated with the wireless control system. Each sensor may be engaged to control its host fixture, satellite luminaires within its group, up to four motion zones or the entire network.