

## OVERVIEW

The Collator forms the gateway between the wireless luminaires and the internet. It can be configured for one-way communication to monitor and review or two-way communication for remote configuration.

### installation

When installing a collator it's important to consider the following -

- Radius - the collator messages can hop between luminaires to extend the range but reliability reduces with the number of hops. It must be installed within range of the first luminaires and ideally within single hop range of at least 20 luminaires.
- Location - it needs to be in the centre of the luminaires and not enclosed. Collators should not be installed in store or plant rooms or in the corner of large areas.
- Quantity - collators can communicate reliably with up to 1,000 luminaires. However, site specific conditions such as concrete, steels, machinery or thick walls will impact the quantity of luminaires which report to an individual collator.
- Supply and Connection - collators need a power supply and a connection to the internet. Supply versions for 3G, Ethernet or Wi-Fi connection.

If you require additional coverage more collators can be added at anytime and no additional commissioning would be required. Lights can report to more than one collator.

### industrial

Used for installations in arduous environments.

- Supplied in an IP65 housing
- Input 230v AC Terminal block for cable up to 2.5mm<sup>2</sup>
- 3w minimum power consumption with a 5w average and 15w peak



Collators can be supplied with 3G connections or Ethernet and Wi-Fi adapters.

### Connection – 3G

A 3G add on pack is available supplied with 12 months data. At the end of the 12 month period, clients can maintain their own SIM contracts.

- 3G provides connectivity without involving the client's IT infrastructure and is generally suitable for all environments which receive a mobile signal.
- Monitoring uses approximately 1 Gb per 1,000 luminaires per month for monitoring with additional data used for.

### Connection – Wi-Fi

- Wi-Fi provides a connection where it is difficult to install Ethernet points.

When using this option is important to consider the stability of the Wi-Fi connection in the building. If the Wi-Fi drops out or the password is changed, then the collator will lose connection to the internet and, without providing an alternative connection, cannot be re-established.

### Connection – Ethernet

- Provides a free wired communication.
- Ethernet is free from the interference of Wi-Fi networks, walls or other physical barriers.
- When using this option it is important to consider the feasibility of installing Ethernet points across an existing building to ensure full coverage.
- Suitable for use with Cat 5, 5e or Cat 6 cable.

### 3G pricing

- Holophane buy blocks of data that can be shared between data-only SIM cards. This is cost-effective for small sites as a minimum SIM contract is typically 5Gb per month and a site with 500 luminaires might only use 10% of this. The contract can therefore be shared between 10 sites. Alternatively, clients can maintain their own SIM contracts.

### security - ethernet & wi-fi only

The internet connection requires DHCP and the following permissions -

destination address	destination port
sync.liteip.com	TCP 80
ws.liteip.com	TCP 80
teamviewer.com	TCP 5938
ubuntu01-liteip.com	TCP 1883, TCP 9001



HSA.GATE Industrial Collator

