

# enLight® enSense™ Microclimate Sensor

## - Monitor air temperature, humidity and barometric pressure



**The new series of enLight® enSense™ sensors have been designed to work in harmony with the enLight platform and use the network created by the upgraded lighting infrastructure to carry the data from where it is being recorded to where it is needed in the cloud. The enSense family includes microclimate, road temperature, traffic volume/speed, flood warning, parking management and a variety of gas sensors for measuring air quality and gas build up.**

The enSense Microclimate Sensor can measure the temperature of the air to 0.1 °C of accuracy from its position in the lantern or fastened to the lamp post. Barometric pressure is measured on a scale of 50 to 115 kPa and relative humidity is measured to  $\pm 0.5\%$ . This data can be used to map varying weather conditions in the local environment compared to macro-predicted and actual levels.

All sensors in the enSense range come in a standard 32mm cylindrical package for easy mounting within an enLight HID lantern, or they can be mounted on the lamp post itself using a bracket. The current set of sensors are wired into the enLight enTalk™ network by connecting to either the enLight entelli-Ballast™ for HID lamps or the enLight enLink™ LED adapter in a loop-in/loop-out configuration.

#### **The Contactless Temperature Sensor features:**

- Provides air temperature, humidity and pressure in a very compact package
- Data can be used to trigger other actions across the enTalk™ network
- All microclimate data can be logged for historical and predictive analysis
- Mountable at height away from interference
- Takes power from enLight lantern or adapter
- Deployable in a lantern or on a bracket attached to a column
- No batteries to replace or recharge
- 5 year guarantee

### enSense™ Technical Specifications:

|                          |                   |                           |                 |
|--------------------------|-------------------|---------------------------|-----------------|
| Environmental protection | IP68              | Colour                    | Black           |
| Temperature range        | -20° to 50°       | In-Lantern mountable      | Yes             |
| Connectivity             | enTalk compatible | Bracket mountable         | Yes             |
| UV tolerant housing      | Yes               | Weight                    | 80g             |
| Air Temperature/Humidity | ±0.1°C/±0.5%      | Barometric pressure range | 50kPa to 115kPa |
| Wired or Wireless        | Wired             | Dimensions                | ø35mm x H40mm   |

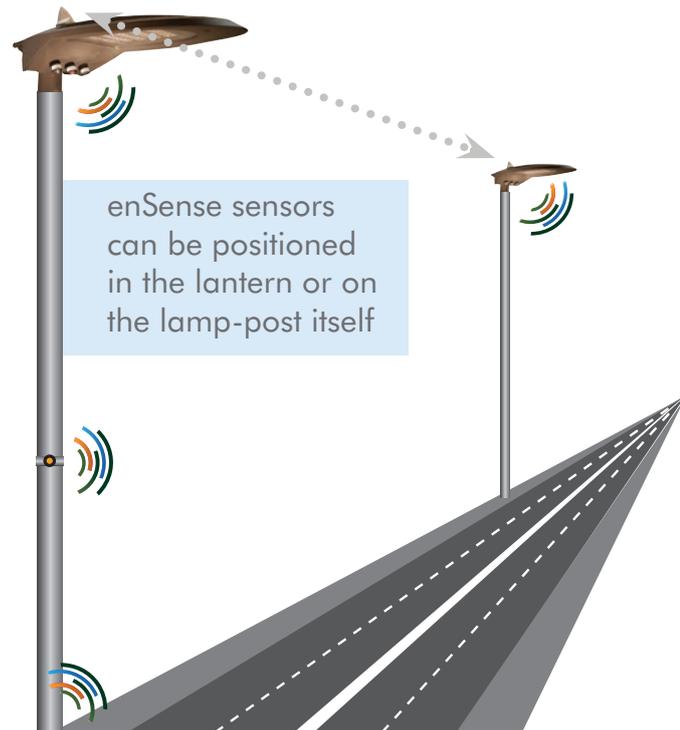
These sensors are still at development phase one (Proof of concept) stage and all specifications are liable to change

### Seamless integration with enLight lighting platform

All enSense sensors are designed to enhance the capability of the enLight platform. Many of the sensors can be pre-mounted in any of the enLight lantern family but they can also be connected and mounted below the lantern itself (such as the air quality or microclimate sensors) or in the lamp post to monitor water table level in the base of the column or tamper detection of the access panel. Larger sensors, such as the traffic sensor, can be mounted on the post below the lantern but can derive their power and connectivity from the lantern via a simple cable connection. Away from the lamp post, wireless enSense devices (coming 2017) can connect to the network via the enLight DOLFin® Pro for their data feed to be sent on to the enLight enGauge™ API.

### Cost effective smart city deployment

By deploying the enLight platform on lamp posts across the city, town or campus, a whole host of smart applications can be realised by utilising the network created by the augmented lighting. Multiple wireless technologies do not need to be funded and the inherent value of the street light estate increases as it allows resource reduction or increased efficiency projects to be deployed, without the major capital cost of their own networks. The enSense sensors are fully compatible with the enLight enCore™ Management System or via other management platforms through the enLight enGauge API.



For more information on enLight® products visit <http://enlight.network>, or contact enLight® via: [sales@enlight.co.uk](mailto:sales@enlight.co.uk) or telephone: +44 (0) 1508 521227



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