



IDRATEK

INTELLIGENT AUTOMATION

xxx-X01

Small Module External Housing

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The xxx-X01 enclosure allows certain IDRATEK modules to be externally mounted. It is suitable for most small sensor modules, although those with a PIR can not be used. It is not suitable for mains switching modules. Access for a single IDRANet cable is via a cable gland on the lower face which provides strain relief onto standard CAT5 when tightened. In addition, there are 2 mesh covered vents for temperature and humidity sensing



Material

- High impact polystyrene
- Colour RAL7035

Mechanical (external)

- 94mm x 94mm footprint (excluding cable gland)
- 57mm deep (excluding dome)
- 15mm (typical) dome protrusion

Environmental

- Temperature range (enclosure only): -40°C to +70°C

Fitting

- 4 x 5mm diameter holes on 50mm pitch fixing centres
- Unit must be mounted with cable entry from underside



Mounting Guidelines

- **Weather considerations:**
The enclosure is IP65 rated prior to the venting holes. In practice this means that the unit will tolerate open air conditions which do not force water (rain/snow) through underside vents (minor splashing tolerated). The unit should therefore always be mounted with the vents facing downwards, preferably in a sheltered location.
- **Sensing Considerations:**
For temperature/humidity sensing applications it is important to be conscious of the factors which will affect the measurements and mount the unit as best as possible to reduce the impact. For example it is important that the unit is mounted in an area which is shaded from the sun – typically facing North in the Northern hemisphere and South in the Southern hemisphere. It is also preferable that the sensor surroundings are mostly shaded, since sunshine falling on dark ground underneath an otherwise shaded sensor will result in hot air rising up to the sensor and skewing the measurements. Similarly whilst mounting the sensor on an external wall under the eaves is good from the point of view of sheltering the sensor, sunshine falling on the wall (particularly if dark surface) will cause the wall to warm up and hot air to rise up to the sensor. A shaded wall (or at least shaded below the sensor) is best.
For light level sensing the considerations are perhaps not as critical since the absolute value of the signal is typically far less important compared to the accurate sensing of dusk/dawn transition. Mounting the sensor such that it receives diffused light (eg. via secondary reflections from matt surfaces) is typically best. The sensor's relatively high sensitivity means that operation in the shade is quite suitable so also matching the requirements for temperature/humidity sensing.

