

## Outdoor Doppler Sensor

HDL-MSOUT.4W

Designed for the outdoors, the HDL-MSOUT.4W can precisely detect temperature, light intensity, humidity, motion, and dry contact status.

With the ability to operate across a wide range of temperature extremes thanks to smart temperature protection, and the potential for hundreds of output targets, the HDL-MSOUT.4W is the ultimate in building protection technology.



Humidity



Temperature



Light  
Intensity



Motion



Switch



Dry  
Contact



*The HDL Doppler sensor has an expected service life of more than 100,000 hours.*

01

## Doppler Motion Sensor

To detect motion a variety of techniques can be used, but the Doppler method is by far the most efficient and effective.

The Doppler sensor used in the HDL-MSOUT.4W is able to:

- Work in  $-40^{\circ}\text{C}$ ~ $60^{\circ}\text{C}$  temperature conditions
- Sense or 'look through' any non-metal object or barrier
- Function in dusty and sandy environments



02

## Tough

With a casing made from Acrylonitrile styrene acrylate, the module has immense toughness, is chemically resilient, has excellent thermal stability, and an outstanding resistance to weathering.

This guarantees a long service life, and ensures that the HDL-MSOUT.4W can stand up to even the toughest conditions.

03

## Low Temperature Protection

Low temperatures can wreak havoc on electrical equipment, that's why HDL has developed the revolutionary smart temperature protection mode.

Automatically engaging when the temperature drops below  $-5^{\circ}\text{C}$ , the modules circuits are warmed to prevent any potential damage.

This allows your HDL-MSOUT.4W to continue operating faultlessly from the depths of winter into the heights of summer.





04

## Logic Control

Ultimate versatility is given through multi-logic inputs, this allows the module to be incorporated into multiple scenes, and output to over 480 targets.

If the module detects movement, security lights can be turned on, shutters closed, sirens triggered, SMS messages sent to a phone, and the security services alerted.

The only limit to the scenes that can be created is your imagination!



05

## Security Integration

Seamless integration with a user's existing security systems, solutions, or alarms is possible thanks to the modules dry contact inputs.

This allows the outdoor Doppler sensor to not only be used in HDL security solutions, but any security system that utilizes a dry contact connection.





## Multifunctional

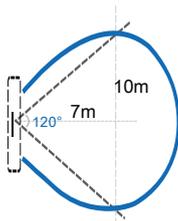
**Temperature, luminosity, humidity, and motion can be detected precisely.**

This allows the module to monitor essential environmental conditions, and warn a building owner of potential intruders and adverse weather conditions.

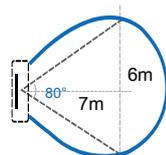
Standard motion sensors are often triggered by pets, generating multiple false alarms.

With the HDL-MSOUT.4W users can set a custom sensitivity level, making these false alarms a thing of the past.

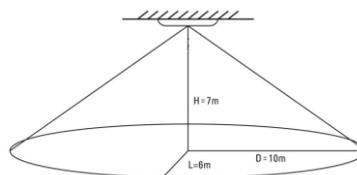
The HDL-MSOUT.4W Doppler sensor brings you the ultimate in versatility, and reliability, empowering building owners to truly secure their property.



Vertical Direction



Horizontal Direction



Doppler Sensing Range