

Installation and Instruction Manual

IP65 HF Zhaga book 18 Standard Motion Sensor
D4i Input device

HYTRONIK®
SAM15-D2

1. Technical Specifications

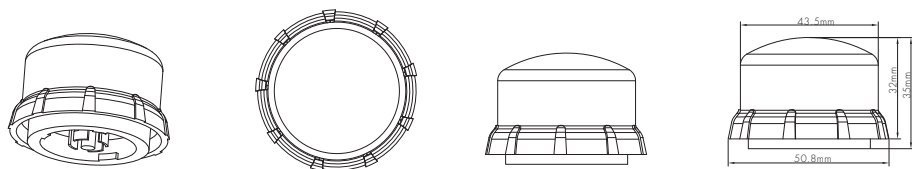
Operating voltage	12-36 VDC
Stand-by power	<0.5W
Quiescent current	25mA
Output	DALI-2
DALI Input voltage	9.5-22.5V
Bus current consumption	2mA
Lux range	0~1023 lux
Sensor principle	High Frequency (microwave)
Detection range*	Max installation height:15m (forklift) 12m (single person) Max detection range: ϕ 15m (forklift) ϕ 20m (single person)
Detection angle	360°
Sensitivity	30% /50% / 75% / 100%
Operation temperature	Ta: -20°C ~ +50°C
Storage temperature	Ta: -40°C ~ +70°C
Relative humidity	10 ~ 90%
IP rating	IP65
Insulation	Class II

2. Download the App

Free App for set-up and commissioning



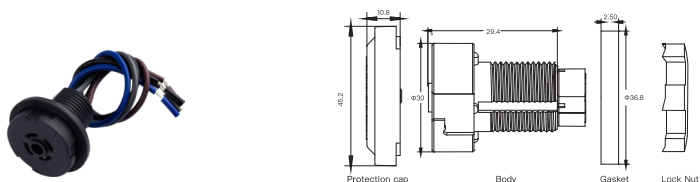
3. Mechanical Structure & Dimensions



4. Receptacle Accessory

The HA18SKT receptacle is designed to be compatible with the SAM15 and HIR15 series products. It provides a Zhaga Book 18 standard interface, suitable for roadway lighting, area lighting, and occupancy lighting applications.

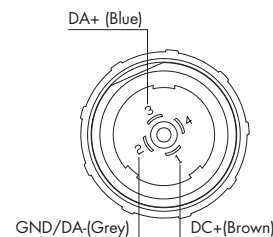
Mechanical Structure & Dimensions



For more details, please refer to <https://hytronik.com/product/ha18skt>

Note: HA18SKT not included in the package.

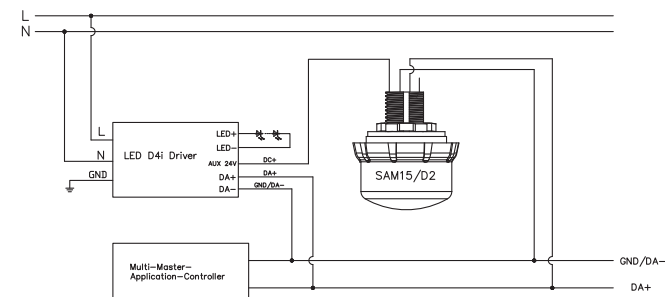
5. Wiring Diagram Notes



- The total current on the DALI bus must not exceed 250mA.
- When using D4i drivers, if the total current exceeds this limit, a third-party DALI controller can shut down the DALI bus power supply via command.
- Terminal block 4 is left unpopulated by default. No wiring required.

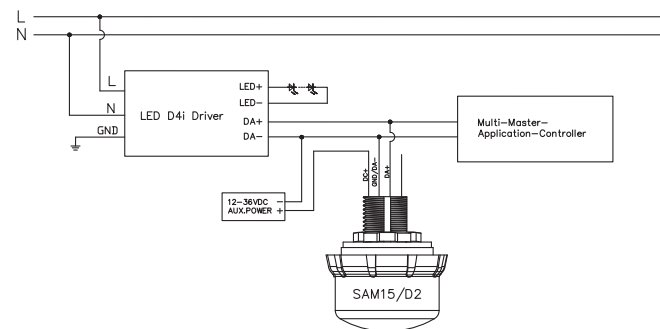
Wiring Diagram 1

D4i Driver with Built-in AUX



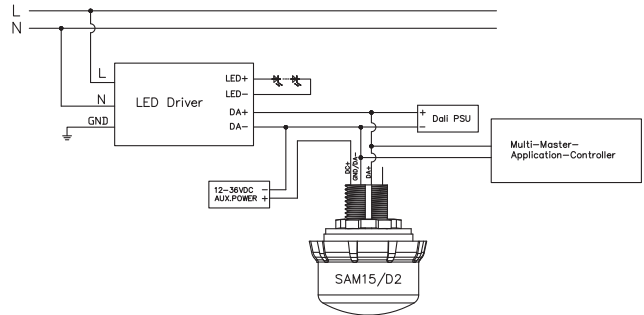
Wiring Diagram 2

D4i Driver with External AUX



Wiring Diagram 3

Standard Driver with External AUX & PSU



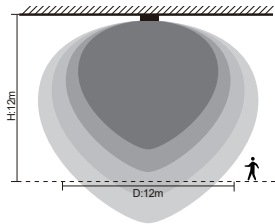
6. Detection Range

The data above is tested under following conditions:

- Single person walking;
- Sensor not connected to any driver that may have soft-on period;
- Testing temperature Ta = 20°C;

The sensor detection area shown in this table is relevant for an empty space.

In areas with hard surfaces such as metal racking and/or glass corridors then the detection range can be extended from these internal reflections by up to 30%.



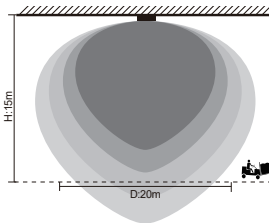
Height (m)	Sensitivity				
	100%	75%	50%	30%	10%
Diameter (Ø :m)					
12	12	9	6	none	none
8	13	10	6	2	none
5	14	11	7	5	2
3	15	12	8	6	5

The data above is tested under following conditions:

- Forklift driving at a speed of 15km/h;
- Sensor not connected to any driver that may have soft-on period;
- Testing temperature Ta = 20°C;

The sensor detection area shown in this table is relevant for an empty space.

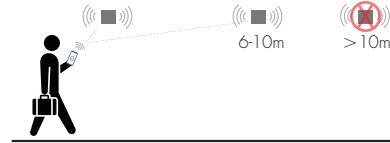
In areas with hard surfaces such as metal racking and/or glass corridors then the detection range can be extended from these internal reflections by up to 30%.



Height (m)	Sensitivity
	100%
15	Diameter (Ø :m)
	20

Placement Guide and Typical Range

Smart Phone to Device Range



The smart device with the App installed will have a typical range of 10m, but varies from device to device. During commissioning, the installer will need to be in range of the devices when searching for devices to add to the network.

Once the devices have been added to the network via the App, the devices will start communicating within the wireless mesh. This means that once the network is complete, all devices are accessible from the smart device when in a 20m range of a single point.

7. Additional Information / Documents

1. To learn more about detailed product features/functions, please kindly refer to <https://hytronik.com/product/sam15-ble>
2. Regarding precautions for Bluetooth product installation and operation, please kindly refer to <https://hytronik.com/service/downloads> (Bluetooth Products Precautions for Product lnnstallation and Operation)
3. Regarding precautions for Microwave sensor installation and operation, please kindly refer to <https://hytronik.com/service/downloads> (Microwave Sensors Precautions for Product Installation and Operation)
4. Data sheet is subject to change without notice, Please always refer to the most recent release on <https://hytronik.com/products/motion-daylight-sensors>
5. Regarding Hytronik standard guarantee policy, please kindly refer to <https://hytronik.com/service/downloads> (Guarantee Conditions document)