

WIRELESS MOTION SENSOR

ARTIS A20

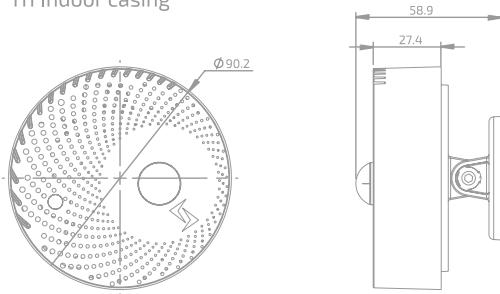
Multifunction Bluetooth Smart Motion Sensor

Artis A20 is a modular motion sensor that can be fully customized to suit the requirements of any building. With its advanced wireless mesh technology, installation becomes seamless and maintenance is kept to a minimum.

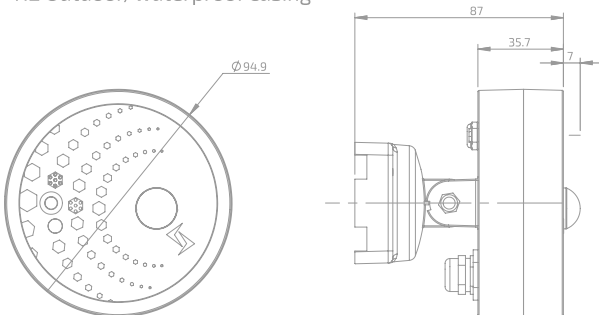
Artis A20 motion sensor enables the collection of various data points, including people motion, ambient light, temperature, pressure, humidity, indoor air quality (IAQ), odors, and noise. These valuable insights are then analyzed and integrated into Sycra CC to optimize building automation, resulting in enhanced energy efficiency and streamlined operations.

Additionally, the Artis A20 motion sensor supports Over-The-Air (OTA) and Device Management (DM) protocols, allowing for convenient monitoring, maintenance, and firmware updates. Experience the power of precise motion sensing with the Artis A20 motion sensor.

H1 Indoor casing



H2 Outdoor/waterproof casing



Features

- Wireless mesh compliant / Beacon function
- PIR motion sensor / occupancy detection
- Ambient light / Daylight harvesting
- Temperature
- Humidity
- Indoor Air Quality/CO2
- Compact form factor
- Autonomous sensor-based control
- OTA firmware upgrade
- Scheduler control (plan)
- Mobile APP for calibration and commissioning

Applications

- Open offices
- Individual offices
- Conference rooms
- Classrooms
- Retail stores
- Hospitals
- Lobbies
- Sanitary Facilities

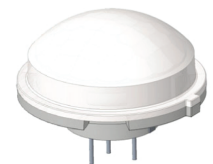
Technical data

Colors	White, Black
Operating Temperature	0°C~40°C 32°F~104°F
Size (mm)	H1: $\Phi 90 \times 54.6$ (H1) H2: $\Phi 95 \times 166$ (H2)
Ingress Protection	H1 : IP20 , H2: IP66
Material	ABS
Weight	Up to 100g / up to 0.22Lbs.
Input voltage	12~48VDC / 110~220VAC
Current consumption	< 30mA
Connection	Wireless Mesh (30m) Line of Sight
Ambient Light Sensor	100 lux to 20,000 lux $\pm 5\%$ F5 Spectral range 380-780nm
Ambient Sensor (Optional)	
Temperature	-40°C~+85°C
Humidity	0 % to 100 %RH $\pm 3\%$ RH
Atmospheric Pressure	300 – 1100hPa ± 1.7 hPa
Noise	30-90dB
Gas (Optional)	
IAQ	UBA ¹ and PBAQ ² standards
CO ₂	400-5000ppm
TVOC	1 to 2000 $\mu\text{g}/\text{m}^3$

Optional lenses



Linear curtain beam pattern, ideal for wall mounting and ceiling in corridors

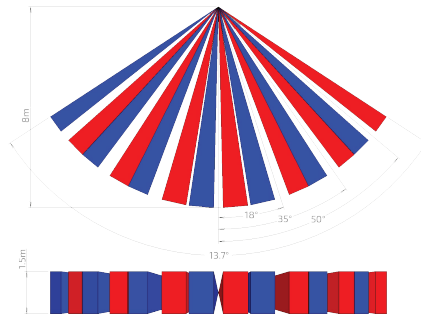
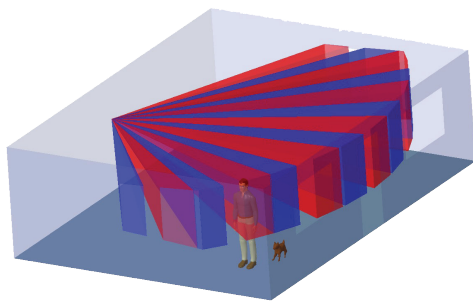


360deg beam pattern with 100deg FOV and up to 7m field at 2.4m mounting height, ideal for ceiling mount applications

Sensor Range

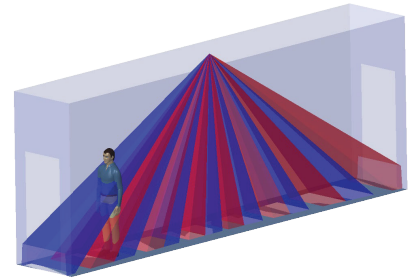
Wall mount installation

Bookshelf device, mounted 1.5m above floor, detects humans, immune to pets.



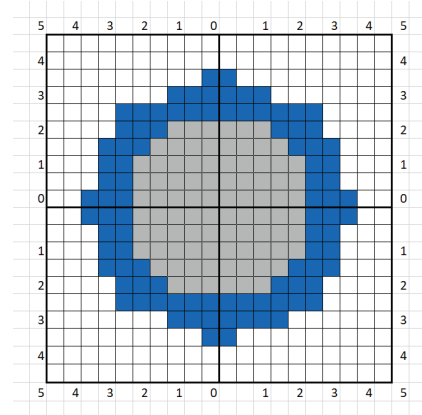
Linear lens installation

Ideal for ceiling mounted luminaires. Detector is immune from air movement around windows and doors.



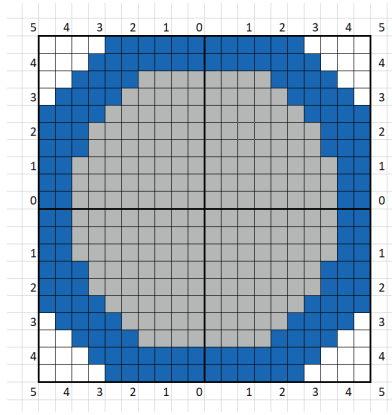
Overhead installation @ 2.4m height

Sensing average Ø8m



Overhead installation @ 4m height

Sensing Average Ø10m

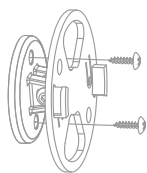


- **Minor motion detection.**
Hand or leg movements within each 0.5m square are enough to trigger the sensor.
- **Major motion detection.**
Sensor is triggered when human target moves from one 0.5m square to an adjacent 0.5m square.
- No detection.**
Sensor was not triggered in this area

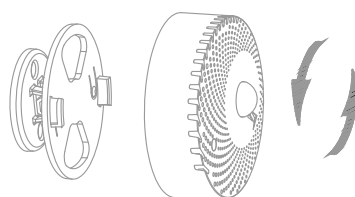
Each square is 0.5m x 0.5m.
Overall grid size is 10m x 10m.

Installation diagrams

H1 Wall mount installation

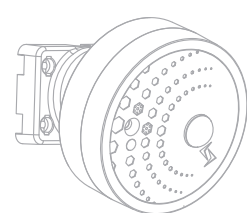


STEP 1: Fix the body to the wall with the 2 provided screws



STEP 2: Clip the body onto the main base plate.

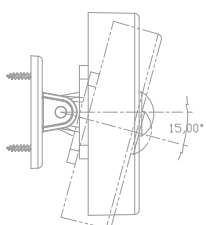
H2 Wall mount installation



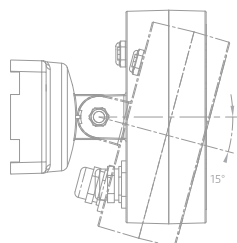
Fix the body with the 4 provided screws

Tilt Adjustment

H1 Version Tilt

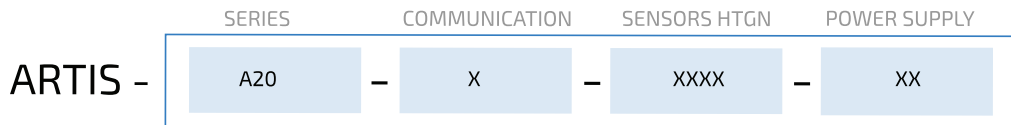


H2 Version Tilt



Wall mount Version (Standard)	Overhead Version
15°	0°

Configuration options



E.g. Artis A20B1011D2 means Artis sensor with motion sensor module, light sensor, temperature, humidity and pressure sensor, gas sensor, and noise sensor, which is powered by DC5V, mounted on the ceiling.

Series

- A20 PIR Motion sensor
- A40 24Ghz Radar Sensor - Short Range
- A40L 24Ghz Radar Sensor - Long Range
- A80 Ultra-Wide Band Sensor

Sensors

- H: Temperature, humidity and pressure sensor..... 0/1
- T: Temperature sensor..... 0/1
- G: Gas sensor..... 0/1
- N: Noise sensor..... 0/1

Communication

- B Wireless mesh
- L LoRa
- Z Zigbee
- T Thread

Power supply

- D1 12-48Vdc
- D2 5Vdc



Germany
Stahlgruberring 36
81829 Munich,
Germany
(49) 89 215522535

Hong Kong
Unit 725, 7/F, Building 19W,
No. 19 Science Park West Avenue,
Hong Kong
(852) 6575 0495

China
7 Ganli 6th rd, 2F Building 2,
Longgang district, 518000
Shenzhen, China
(86) 755 2891 1623

Disclaimer:
Sycra® reserves the right to make changes to this product at any time without prior notice and such modification shall be effective immediately. For more information and details, visit www.sycratech.com or contact info@sycratech.com.