

AXIS D6210 Air Quality Sensor

Seamlessly add indoor air quality monitoring to Axis devices

Manage your indoor environment with this air quality sensor. It works with selected Axis IP devices to detect vaping and smoking as well as various air pollutants such as particle matter (PM), carbon dioxide (CO₂), and more. It's possible to trigger an event whenever defined thresholds are breached. For instance, when the connected device is integrated with other devices, you can automate responses. It can be used to document compliance with indoor air quality regulations. Furthermore, portcast technology enables simple connection to Axis devices and makes it easy to add this sensor to existing systems without the need for additional IP addresses, switch ports, or power.

- > **Measure indoor air quality (IAQ)**
- > **Detect vaping and smoking**
- > **Trigger automatic actions**
- > **Portcast enables simple connection to Axis devices**
- > **Adds enhanced functionality to selected Axis devices**



AXIS D6210 Air Quality Sensor

Sensor parameters

Temperature

Range: -10 °C to 45 °C (14 °F to 113 °F)

Accuracy: ± 0.7 °C

Humidity

Range: 0 to 100 %RH

Accuracy: ± 6 %RH

Carbon dioxide (CO₂)

Range: 0 to 40000 ppm

Accuracy: 400 to 1000 ppm : $\pm(50 + 2.5 \% \text{ m.v.}^{(1)})$ ppm,

1001 to 2000 ppm : $\pm(50 + 3 \% \text{ m.v.}^{(1)})$ ppm,

2001 to 5000 ppm : $\pm(40 + 5 \% \text{ m.v.}^{(1)})$ ppm

Particle matter (PM1.0)

Range: 0 to 1000 $\mu\text{g}/\text{m}^3$

Accuracy: 0 to 100 $\mu\text{g}/\text{m}^3$: $\pm 5 \% \text{ m.v.}^{(1)}$

Accuracy: 101 to 1000 $\mu\text{g}/\text{m}^3$: $\pm 10 \% \text{ m.v.}^{(1)}$

Particle matter (PM2.5)

Range: 0 to 1000 $\mu\text{g}/\text{m}^3$

Accuracy: 0 to 100 $\mu\text{g}/\text{m}^3$: $\pm 5 \% \text{ m.v.}^{(1)}$

Accuracy: 101 to 1000 $\mu\text{g}/\text{m}^3$: $\pm 10 \% \text{ m.v.}^{(1)}$

Particle matter (PM4.0)

Range: 0 to 1000 $\mu\text{g}/\text{m}^3$

Accuracy : $\pm 25 \% \text{ m.v.}^{(1)}$

Particle matter (PM10.0)

Range: 0 to 1000 $\mu\text{g}/\text{m}^3$

Accuracy : $\pm 25 \% \text{ m.v.}^{(1)}$

Volatile organic compounds (VOC) index

Range: 0 to 500

Accuracy: $\pm 5 \% \text{ m.v.}^{(1)}$

Air quality index (AQI)

Range: 0 to 500

Accuracy: $\pm 10 \% \text{ m.v.}^{(1)}$

Nitric oxide and nitrogen dioxide (NO_x) index

Range: 0 to 500

Accuracy: $\pm 10 \% \text{ m.v.}^{(1)}$

Humidex

Range: 0 °C to 96 °C (32 °F to 205 °F)

Accuracy: ± 0.7 °C (± 1.26 °F)

Heat index

Range: 0 °C to 153 °C (32 °F to 307 °F)

Accuracy: ± 0.7 °C (± 1.26 °F)

Sampling frequency

1 sample/second⁽²⁾

Storage frequency

1 sample/30 seconds, up to 90 days⁽³⁾

Network

– with supported camera

Security

Password protection, IP address filtering, HTTPS⁽⁴⁾ encryption, IEEE 802.1X⁽⁴⁾ network access control, digest authentication, user access log, centralized certificate management

Network protocols

IPv4, IPv6, USGv6, ICMPv4/ICMPv6, HTTP, HTTPS⁽⁴⁾, HTTP/2, TLS⁽⁴⁾, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDP, CDP, MQTT v3.1.1, Syslog, Link-Local address (ZeroConf), IEEE 802.1X (EAP-TLS), IEEE 802.1AR

System integration

– with supported camera

Application Programming Interface

Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at axis.com

One-Click Connection

Modbus server over IP: Modbus TCP protocol and Ethernet on switch port mode

1. Of measured value.

2. Applies to all the sensors in this product.

3. Applies to all the sensors in this product. The data is stored on the connected device.

4. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (www.openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).

Analytics Supported

Support for AXIS Camera Application Platform enabling installation of third-party applications, see axis.com/acap

Event triggers Air quality monitor

Event actions

Flash I/O interface status LED
Flash I/O interface status LED while the rule is active

Approvals

Product markings

UL, CE, FCC, KC, VCCI, RCM

EMC

EN 55032 Class A, EN 55035, EN 61000-6-1, EN 61000-6-2
Australia/New Zealand: RCM AS/NZS CISPR 32 Class A
Canada: ICES-3(A)/NMB-3(A)
Japan: VCCI Class A
Korea: KS C 9835, KS C 9832 Class A
USA: FCC Part 15 Subpart B Class A

Safety

IEC/EN/UL 62368-1, CAN/CSA C22.2 No. 62368-1 ed.3, IEC/EN 60825-1 Class 1

Environment

IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78, IEC/EN 62262 IK08

Accreditations

RESET® Accredited Monitor

General

Supported products

For a complete list of supported products, go to axis.com/products/axis-d6210-air-quality-sensor

Casing

Polycarbonate casing, encapsulated electronics
Color: White NCS S 1002-B

Mounting

Wall
Ceiling
Connected anywhere between switch and host device, up to 100 m (330 ft).

Display and indicators

Multi color status LED (red, amber, green, and blue).

Power

Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 2, 3 or IEEE 802.3at Type 2 Class 4.⁽⁵⁾
AXIS D6210 feeds power to the camera.
Typical power consumption: 2 W
Max power consumption: 2.2 W

Connectors

PoE in: RJ45 10BASE-T/100BASE-TX
PoE out: RJ45 10BASE-T/100BASE-TX

Coverage

Sensor area of coverage: 12.57m² (135ft²).

Operating conditions

Recommended temperature: 5 °C to 35 °C (41°F to 95 °F)⁽⁶⁾
Recommended humidity: 20 to 80% RH (non-condensing)⁽⁶⁾
Operating temperature: -10 °C to 45 °C (14 °F to 113 °F)
Operating humidity: 0 to 90% RH (non-condensing)

Storage conditions

Temperature: -40 °C to 65 °C (-40 °F to 149 °F)
Humidity: 0 to 80% RH (non-condensing)

Dimensions

For the overall product dimensions, see the dimension drawing in this datasheet.

Weight

225 g (0.5 lb)

Box content

AXIS D6210 Air Quality Sensor, installation guide

Optional accessories

AXIS TM3101 Pendant Wall Mount
AXIS TM4101 Pendant Kit
For more accessories, see axis.com

5. This depends on the camera.

6. This is the optimal range to ensure the best performance. Exposure to conditions outside the recommended range may reduce sensor performance.

Video management software

With supported camera:

AXIS Companion, AXIS Camera Station, video management software from Axis' Application Development Partners available at axis.com/vms

Warranty

5-year warranty, see axis.com/warranty

Part numbers

Available at axis.com/products/axis-d6210-air-quality-sensor#part-numbers

Sustainability

50% recycled plastic

