monkeytronics

AirSmart Solar Max

Solar-powered air quality monitor for schools, businesses and community spaces. No cables, no Wi-Fi, no charging.

Temperature | Humidity | CO_2 | Lighting | Sound Level

Scan QR or visit **docs.monkeytronics.co.nz** to access more information about our products.

contact@monkeytronics.co.nz monkeytronics.co.nz

Overview

AirSmart Solar Max runs on indoor light. Advanced perovskite solar cells keep its battery topped up, so it is designed never to need recharging: no cables to run, no batteries to swap and nothing to charge.

It connects over the cellular network with its own global SIM, so there is no Wi-Fi setup, no passwords and nothing on your network for IT to secure. Its large 800 × 480 e-paper display is readable in bright daylight, so everyone in the room can see the air quality at a glance.

Installation

Installing your AirSmart Solar Max takes a few minutes. No cables, no Wi-Fi setup.

1. Mount the wall plate
2. Slot the monitor onto the plate
3. Scan the QR code to register it

Use the screw template supplied with the wall plate. Registration is done in the AirSmart Installer app.

Accuracy

Temperature[1]	Humidity	CO_2[2]
± 0.2 °C	± 2 %	± 50 ppm ± 3 %

Lighting[3]	Sound Level[4]
± 20 %	± 1 dBA

Specs

Dimensions	19.6 cm × 14.7 cm × 1.9 cm
Display	800 × 480 monochrome e-paper
Power	Indoor perovskite solar, NiMH battery (2,500 mAh), optional USB-C boost charge
Connectivity	LTE-M / NB-IoT cellular, global SIM included
Security	TLS / DTLS, hardware-backed key storage
Cloud Reporting Interval	Every 15 minutes
Operating Range	0 to 50 °C, 0 to 85 %RH

[1] Sensirion SHT30 typical figures: temperature ±0.2 °C, humidity ±2 %RH.
[2] Senseair Sunlight datasheet 006-1-0100: CO_2 ±50 ppm ±3 % of reading, 400 to 5,000 ppm.
[3] ams TSL2572 datasheet, page 8: output under a fixed white light 4,000 to 6,000 counts (typical 5,000), a spread of ±20 %. The datasheet states no lux accuracy.
[4] TDK ICS-43434 microphone, sensitivity tolerance ±1 dB.

Benefits

- Designed never to need recharging: indoor solar keeps the battery topped up
- No cables, no battery swaps and no charging, so it needs no attention once installed
- Works from day one on the cellular network, with no Wi-Fi provisioning, passwords or LAN security issues
- Zero-touch install almost anywhere, ideal where an outside installer fits the monitors
- A large display readable across the room, sized for classrooms, offices and community spaces

Features

- Large 800 × 480 e-paper display, readable in daylight
- Indoor solar power, designed never to need recharging
- Cellular with a global SIM, no Wi-Fi needed
- Zero-touch install: scan the QR code and go
- Real-time data for CO_2, temperature, humidity, lighting & sound
- Mobile app for data access anywhere
- Web portal with reporting
- Customisable notifications