ARVE SENSE Pro

Swiss Air Quality Monitoring System

Air Quality Performance Index

One Index. A Clearer View of Indoor Air Quality.

Index Parameters

- Temperature
- Relative Humidity
- Carbon Dioxide (CO_2)
- Total Volatile Organic Compounds (TVOC)
- Particulate Matter ($PM_{2.5}$)

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SWISS AIR QUALITY SYSTEM

Purpose

The ARVE Air Quality Performance Index converts key indoor environmental measurements into a clear, four-level performance rating. It provides an immediate view of current indoor conditions and helps users identify when environmental parameters require attention.

Performance Levels

Good
Indoor conditions are within the defined target range.

Acceptable
Conditions remain within an acceptable range, with some parameters approaching defined limits.

Moderate
One or more parameters require attention and may warrant corrective action.

Poor
One or more parameters exceed defined limits and require prompt attention.

Air Quality Performance Index

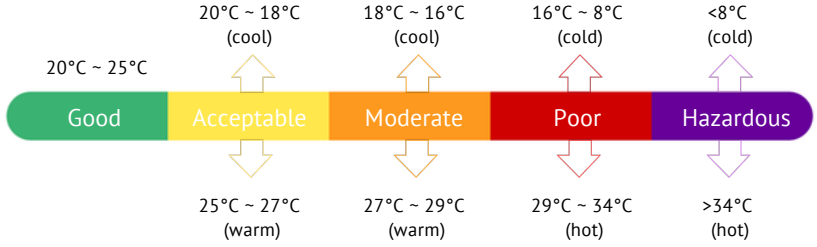
Performance Thresholds

The index classifies measured indoor environmental conditions into five performance levels based on defined parameter ranges.

Parameter	Good	Acceptable	Moderate	Poor	Hazardous
Temperature (°C)	20–25	18–20 / 25–27	16–18 / 27–29	8–16 / 29–34	<8 / >34
Relative Humidity (%RH)	40–50	30–40 / 50–60	23–30 / 60–70	14–23 / 70–80	0–14 / 80–100
CO_2 (ppm)	0–1,000	1,000–2,000	2,000–3,000	3,000–5,000	>5,000
TVOC (ppb)	0–300	300–500	500–3,000	3,000–25,000	>25,000
$PM_{2.5}$ (µg/m³)	0–12	12–35	35–55	55–150	>150

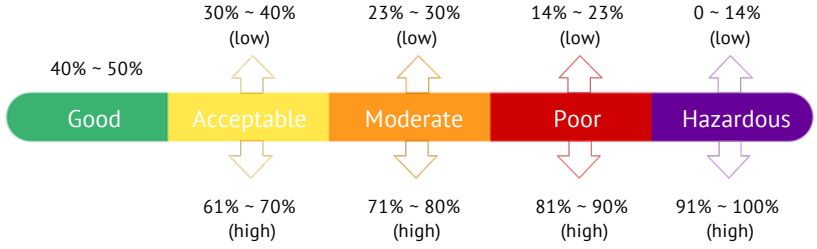
Temperature

Influences thermal comfort and the suitability of indoor conditions for occupants.



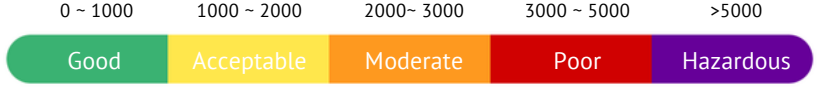
Relative Humidity

Affects thermal comfort and the indoor environment; both very low and very high humidity can indicate undesirable conditions.



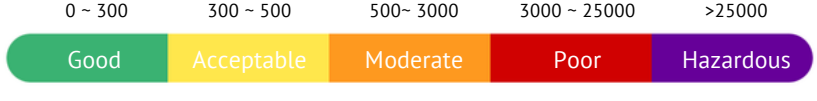
CO_2

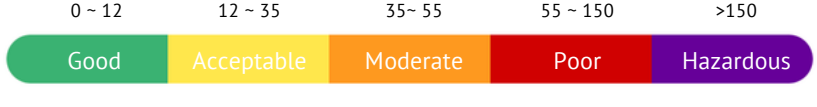
Primarily indicates ventilation conditions and occupancy-related changes in indoor air.



TVOC

Indicates the presence and concentration of volatile organic compounds from potential indoor sources.



$PM_{2.5}$

Indicates the concentration of fine particulate matter suspended in indoor air.