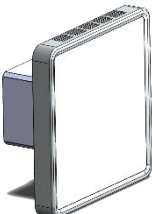






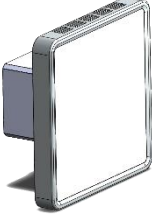




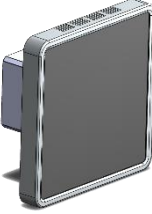









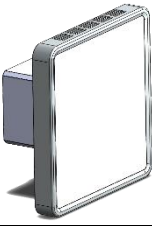


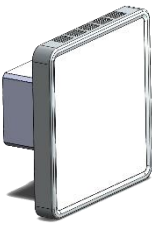

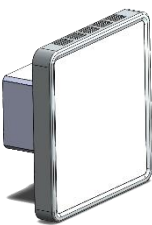

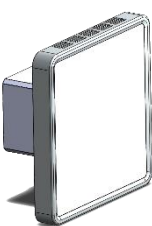






# EP5000 IAQ Range

## Indoor Air Quality probes

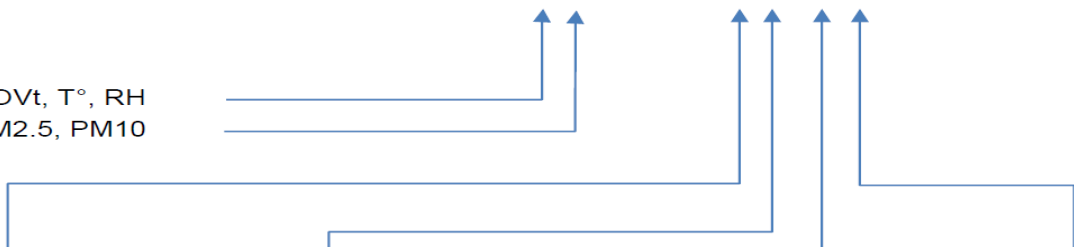
	Ref	Power	Measure	Setting	Communication	Avail.
	EP5000ME-N EP5000MME-N EP5000ML-N EP5000MML-N	24V DC	CO2 VOC PM10 PM2.5 PM1 T°	  	      	2021
	EP5000MB-N EP5000MEB-N EP5000MZ-N  EP5000WB-N		Humidity Noise At. P Lux, color T°			2022   2023
	EP5000M-N	24V DC	CO2 VOC PM10 PM2.5 PM1 T° Humidity Noise At. P Lux, color T°	    	  	2021
	E5000AE	Indoor light	CO2 VOC T° Humidity		   	2023
	E5000AL E5000AZ					2024
	EP5000K-N	Bus KNX	CO2 VOC PM10 PM2.5 PM1 T° Humidity Noise At. P Lux, color T°	    ETS	  	?

	E5000VP	24V DC	CO2 VOC PM T° Humidity Noise Lux, color T°			2021
	E5000VM-C	24V DC	CO2			2022 (MOQ 1K)
	P5000VM-2	24V DC	PM2.5			2022 (MOQ 1K)
	EP5000VM-B	24V DC	CO2 PM2.5		 	2022 (MOQ 1K)

### EP5000 Line

### XX5000 XX-YY

**E** = CO2, COVt, T°, RH  
**P** = PM1, PM2.5, PM10



M	Modbus		No Option	F	AP, Noise, lux, Color T°, flickering		Single band CO2
MM	Modbus Master	E*	EnOcean	N	Atm. Press., Noise, lux, Color T°	D	Dual band CO2
Z	ZigBee	L*	LoRaWAN	T	Atm. Press., lux, Color T°		
E*	EnOcean	B	BLE & iBeacon	C	CO2 only		
L*	LoRaWAN	0	No LED	2	PM2.5 only		
VP	0-10V PI	Z	ZigBee	B	CO2 and PM2.5 only		
K	KNX						
W	Wi-Fi						
A	Autonomous						
B	BLE & iBeacon						

Note: MM version compatible with Belimo ModBus actuators (VAV or dumpers) only.

Code *	Region	Frequency [MHz]	Power
(settable via App for LoRaWAN)	EU	868	+14 dBm
1	US & CA	915	+20 dBm
2	CN	779	+10 dBm
3	AS	923	+16 dBm
4	IN	865	+20 dBm
5	KR	920	+10 dBm
6	RU	868	+16 dBm

# To comply with in force regulations on buildings energy efficiency, ventilation must be automatically on demand controlled.

## Measuring indoor Air quality for HVAC (heating, ventilating, and air conditioning) control

Energy losses by air renewal in a conventional building are estimated to 30% of the heating and air conditioning cost. Losses become predominant for very isolated buildings even with double flow ventilation. The increasing airproofing of buildings also imposes an on demand air renewal based on IAQ to ensure comfort and health.

By controlling the ventilation on human occupancy materialized by the expiration of CO<sub>2</sub> (meeting rooms, offices, bedroom) and air quality (VOC, toxic compounds and odours), significant energy savings can be achieved.

## Multi sensors probe flush mount line.

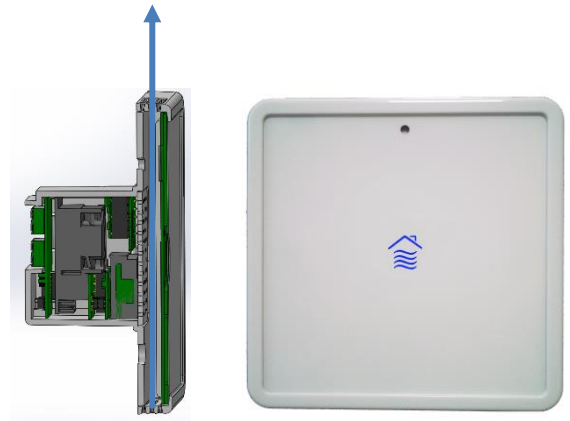
Those probes are the most comprehensive on the market and can combine the following measurements:

### IAQ:

- CO<sub>2</sub>
- Total VOC
- Humidity
- Temperature
- PM<sub>10</sub>
- PM<sub>2.5</sub>
- PM<sub>1</sub>
- Sulphurous odours
- Ozone (optional)

### Ambience:

- Noise
- Atmospheric pressure
- Luminosity, light colour temperature (flickering for OEM customers only)



## Those probes can be easily integrated into most of wired and wireless ecosystems

KNX, Modbus, EnOcean, ZigBee, Thread, simple or dual 0-10V...

## Easy commissioning

NFC allows setting with a smartphone and a free App even with unpowered devices.



## Direct user interface without complex and risky Cloud

Bluetooth low energy communication as well as iBeacon allow direct communication and data logging transfer of the 15 last days to a smartphone for IAQ monitoring. Historic graphs with physiological effects (**Smart QAI**® algorithm) provide obvious indicators (Productivity, irritation of the respiratory tract, skin, eyes, health, quality of sleep). The smartphone App also allows all settings and commissioning. Physiological effects Indicators can be use as setting points.

## Long range IOT compatibility for IAQ monitoring and recording

LoRaWAN LPWA (Low Power Wide Area) network.










## Maintenance free

Sensors has been selected and are managed in order to achieve at least 10 years' life span without any maintenance or recalibration.

Each sensor reaching his end of life is plug and play replaceable thanks to the Built In Test Equipment information for low MTTR.

# OAQ Range

## Outdoor Air quality probes

	Ref	Power	Measure	Setting	Communication	Avail.
	QAA-E QAA-L	24V DC	PM10 PM2.5 PM1 T° Humidity Noise	No		2019
			O3 NO2			2022
	QAA_M	24V DC	PM10 PM2.5 PM1 T° Humidity Noise	No		2019
						2022
	QAA_AX	Sun light	PM10 PM2.5 PM1 T° Humidity Noise			2023
			NO2 O3			

### Usage

Used on a street and yard or backyard facade, a OAQ probe integrated into a building's ecosystem can adjust the remediation strategies of IAQ probes and provide information on the appropriateness of windows opening.

