

LogicMachine Ambient

LM Ambient is an ecodesigned wall-mounted controller with gesture control that transforms the device into smart push-button. Temperature, humidity, barometer, air quality and light sensors measure and control environment around you. Ambient lighting can work as LED lamp or notificator.

LM Ambient consists of sensor platform, visualization server, cross-standard gateway, scenarios and logic engine. It supports KNXnet/IP, Modbus TCP and BACnet. It also has built-in bi-directional EnOcean, Bluetooth 4.0 Low Energy interfaces.

LM Ambient provides ecosystem for IoT including pairing with wearable electronics, platform for custom applications and external development possibilities.



ENG - Data sheet

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Applications

- Infrastructure device
- Gateway
- Presence monitoring
- Smart thermostat
- Gesture push-button
- Ambient light
- Sound / light / wearable notification center
- HVAC
- Universal controller (lighting, shutters etc.)
- Health / activity monitoring
- Security
- Application server
- Internet-of-Things / Cloud integration

Included in the kit

1 x LM Ambient with an ecodesign wooden enclosure
1 x 1.5 m Ethernet cable
2 x wall screws Ø 3.5 mm, length 30 mm
2 x nylon plugs Ø 3.5 – 6 mm, length 30 mm
1 x 24V DC power supply with PoE (optional)

Types of product

LogicMachine Ambient with Air Quality / VOC sensor	LMWN02
LogicMachine Ambient with General Air Quality sensor	LMWN00
LogicMachine Ambient EnOcean with Air Quality / VOC sensor	LMWE02
LogicMachine Ambient EnOcean with General Air Quality sensor	LMWE00

Standards and norms compliance

EMC:	EN61000-6-1
	EN61000-6-3
PCT	Certificate

Technical data:

Power supply: 24V DC Passive Power over Ethernet or from power supply

Power consumption: 2 W

Interfaces:	10BaseT/100BaseTX	1 with PoE support
	USB2.0	1
	EnOcean 868MHz	1 (LMWE02, LMWE00)
	Bluetooth 3.0 and 4.0	1
	Reset push button	1
	Buzzer	1
	RGB LED light	1
	LED locator (blue)	1
	Gesture control sensor	1
	Humidity sensor	1
	Temperature sensor	1
	Air quality / VOC	1 (LMWN02, LMWE02)
	General air quality	1 (LMWN00, LMWE00)
	Barometer	1
	Ambient light sensor	1
	InfraRed blaster (optional)	1

Connections:	KNXnet/IP:	Ethernet
	Modbus TCP	Ethernet
	BACnet IP	Ethernet
	Power supply:	Ethernet or Cage Clamp

Target gases:	General air quality	hydrogen, ethanol, methane, CO etc.
	Air quality / VOC	ammonia, H2S, ethanol, toluene and VOCs like

acetone, ethanol, isoprene,
CO2, methane, hydrogen,
alcohols, esters, limonene etc.

Operating elements	LED	1 – CPU load 1 – Activity / Indication
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Enclosure:	Material:	Wooden
	Basic wood types:	Zebrano Radial Oak Tangential Black Lacquer White Lacquer
	Custom wood types:	Beech Macassar Ebony Nut Europe Nut America Oak Radial Palisander Schizandra Red Lacquer

Dimensions:	107(W)x107(H)x22(L) mm
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Usage temperature:	0C ... +45C
Storage temperature:	-15C ... +55C
Weight:	250g
Warranty:	2 years
Relative Humidity:	10...93 % without condensation



Caution Security advice

The installation and assembly of electrical equipment may only be performed by skilled electrician. The devices must not be used in any relation with equipment that supports, directly or indirectly, human health or life or with application that can result danger of people, animals or real value

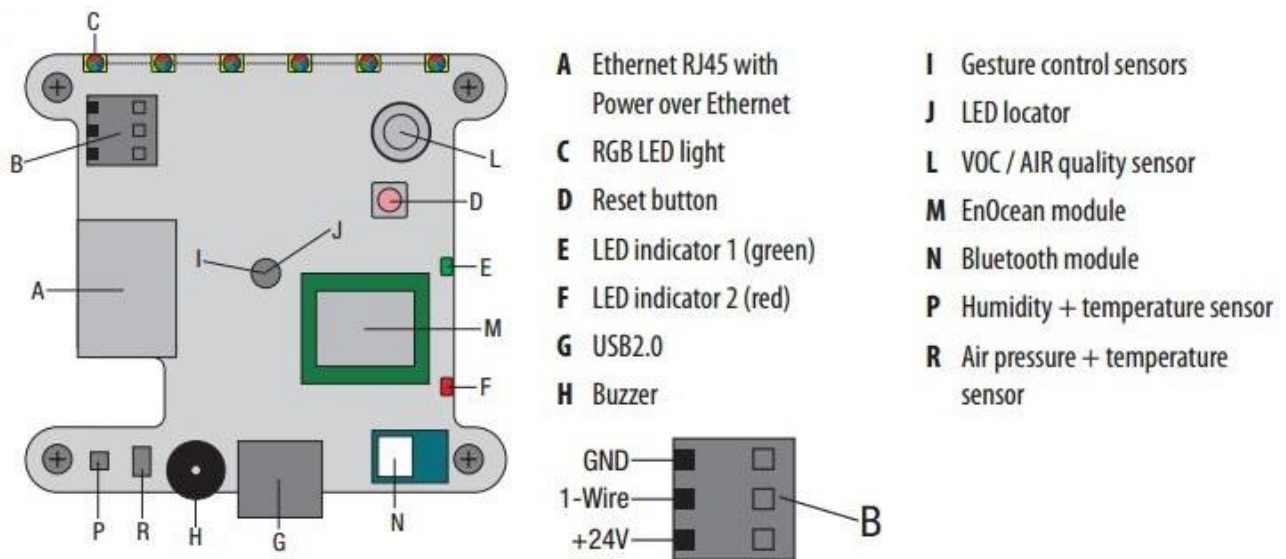
Mounting advice

The devices are supplied in operational status. The cables connections included can be clamped to the housing if required.

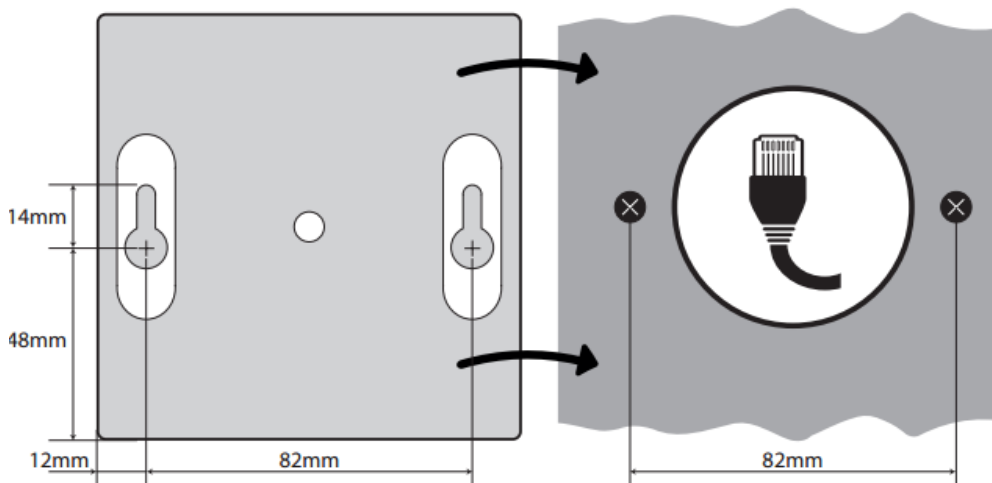
Electrical connection

The devices are constructed for the operation of protective low voltage (SELV). Grounding of device is not needed. When switching the power supply on or off, power surges must be avoided.

Connections and operating elements



Quick startup guide



1. Drill two holes in the wall. The distance between holes is 82 mm.
2. Insert nylon plugs in the wall, then insert screws
3. Prepare Ethernet cable to be connected. We recommend to use a regular wall-mounting box.
4. Attach Ethernet/PoE cable to the device (either from EMBS Ethernet Switch outputs or from **passive PoE adapter with 12-24V DC output!**). If you use a regular 24V DC power supply, connect it accordingly to power input clamps
5. Place the device on the wall

Default IP configuration

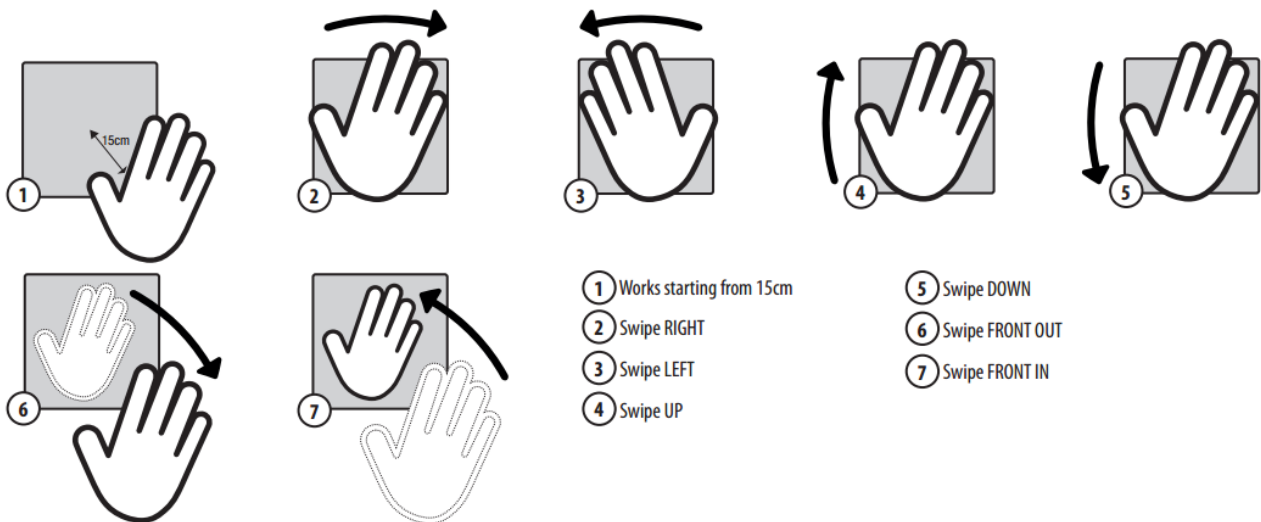
Login name	admin
Password	admin
IP address	192.168.0.10
Network mask	255.255.255.0

Reset device

You can either reboot the device by pressing RESET button or reset the configuration to factory defaults:

- *Press and hold for <10 sec* – reboot the device
- *Press and hold for >10 sec* – reset networking with IP to factory default
- *Press and hold for >10 sec and again press and hold for >10 sec* – full reset of configuration to factory defaults

Gesture control



Basic variations of wooden enclosures



Zebrano Radial



Oak Tangential



Black Lacquer



White Lacquer

Custom variations of wooden enclosures



Beech



Macassar Ebony



Nut America



Oak Radial



Palisander



Schizandra



Red Lacquer



Nut Europe

More types of wood and colors available by request. 3D files of the enclosure are available at www.openrb.com