

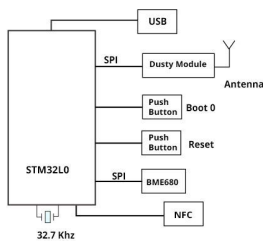
A9 (LoRaWAN • SmartMesh IP • NB IoT • Mesh Ble)

The Midatronics A9 (LoRaWAN, SmartMesh IP, NB IoT, Mesh Ble) device is an air quality and indoor environmental sensor station that integrates high-accuracy gas, pressure, humidity and temperature sensors. The integrated gas sensor can detect a broad range of gases to measure air quality.

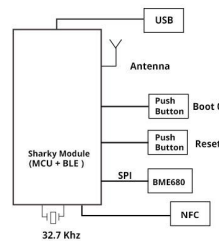
Detected gases include Volatile Organic Compounds (VOC) from paints (such as formaldehyde), lacquers, paint strippers, cleaning supplies, furnishings, office equipment, glues, adhesives and alcohol. Data measured are transmitted to the cloud using LoRaWAN, SmartMesh IP, NB IoT, Mesh Ble technology. There is also a NFC chip to setup the device with a smartphone.



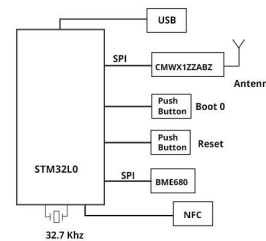
BLOCK DIAGRAM



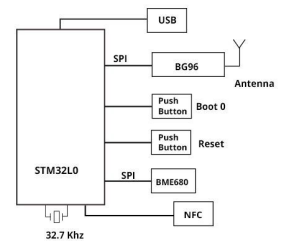
SmartMesh IP



Mesh Ble



LoRaWAN



NB IoT

SPECIFICATION

Supply Voltage	3.6V ER18505
Receiver Sensitivity	-93 dBm
Measured Pressure	300...1100 hPa
Measured Humidity	0...100%
Measured Temperature	-40...85°C
Measured Gas	IAQ (Indoor Air Quality)
Connectivity	SmartMesh IP Mote version
Battery duration	>3 years
Working Temperature	-40°C to 85°C

SmartMesh IP

Supply Voltage	3.6V ER18505
Receiver Sensitivity	-93 dBm
Measured Pressure	300...1100 hPa
Measured Humidity	0...100%
Measured Temperature	-40...85°C
Measured Gas	IAQ (Indoor Air Quality)
Connectivity	BLE Mesh
Battery duration	>3 years
Working Temperature	-40°C to 85°C

Mesh Ble

Supply Voltage	3.6V ER18505
Receiver Sensitivity	-93 dBm
Measured Pressure	300...1100 hPa
Measured Humidity	0...100%
Measured Temperature	-40...85°C
Measured Gas	IAQ (Indoor Air Quality)
Connectivity	LoRaWAN (Version V)
Battery duration	>3 years
Working Temperature	-40°C to 85°C

LoRaWAN

Supply Voltage	3.6V ER18505
Receiver Sensitivity	-93 dBm
Measured Pressure	300...1100 hPa
Measured Humidity	0...100%
Measured Temperature	-40...85°C
Measured Gas	IAQ (Indoor Air Quality)
Connectivity	NB IoT
Battery duration	>3 years
Working Temperature	-40°C to 85°C

NB IoT

MAIN FEATURES (SmartMesh IP, LoRaWAN)

1. High-accuracy gas, pressure, humidity and temperature sensors.
2. Integrated measurement of air quality.
3. Max communication distance up to 100m (SmartMesh IP)
4. Max communication distance up to 2 Km (LoRaWAN)
5. Battery duration: more of 3 years with 4 messages a day
6. Certification included: CE and FCC
7. SmartMesh IP from 14,99 euro for large volumes.

MAIN FEATURES (NB IoT, Mesh Ble)

1. High-accuracy gas, pressure, humidity and temperature sensors.
2. Integrated measurement of air quality.
3. Battery duration: more of 3 years with 4 messages a day
4. Certification included: CE and FCC

For more information please visit

http://midatronics.com/Encapsulated_products/A9

QUICK SPECIFICATION (LoRaWAN, SmartMesh IP, NB IoT, Mesh Ble)

1. Supply Voltage : ER18505 3.6V 4000mAh
2. Interface : NFC / USB
3. Dimensions : 6 x 10 x 3 cm
4. ETSI, RoHS and FCC Certification

ORDERING INFORMATION

Part Number:	Description:
MDX-A9LO-R01	A9 LoRaWAN version 01
MDX-A9SHK-R01	A9 Mesh BLE version 01
MDX-A9NB-R01	A9 NB IoT version 01
MDX-A9DY-R01	A9 SmartMesh IP version 01