OMNIDOTS SWARM Sound Datasheet

Part of Omnidots' environmental monitoring solution

Product Specifications

Generated at the 11th of April 2024, at 11:07:33pm, updated at the 13th of March 2025, at 03:49:23 pm

DATA ACQUISITION

Frequency range	10Hz - 20 kHz
Frequency weighting	A, B, C, Z
Time Weighting	Fast, Slow
Measurements	Leq, Lmax, Lmin, Daily values, Lden, Lpeak
Statistical measurements	Ln [L10, L50, L90]
Bitdepth	32 bit
Sample rate	48 kHz
Audio recordings	8 second fragments
Microphone type	MEMS
Dynamic range	26 dB - 133 dB

GPS LOCATION

Sensor type	GPS receiver
Accuracy	10 meter CEP (33 ft CEP))

LOGGING INTERVAL TIME

Range	1 - 3600 seconds

APPLICABLE STANDARDS

IEC 61672, ANSI S1.43 class 1 tolerances met

HONEYCOMB CLOUD SERVICE (personal dashboard)

Displays	Leq, Lmax, Lmin, Daily values, Lden, Lpeak, Ln (L10, L50, L90)
Exports	Leq, Lmax, Lmin, Lpeak, Ln (L10, L50, L90)
Audio fragments	8 seconds, 4 seconds before trigger
Number of audio fragments	Maximum of 5 highest triggers per hour
Data storage	Secure data centre

ALARM SETTINGS

Triggers	Lmax, Leq, Lden
Type of message	E-mail, SMS, personal dashboard

COMMUNICATION

Wireless	WiFi, 4G/LTE, Bluetooth
Wired	Ethernet

INTERNAL MEMORY

Storage	~ 1 work week storage of log records

AMBIENT CONDITION

Ingress protection rating	IP65
Operating temperature range (preliminary)	-10°C to 70°C (14°F to 158°F)
Storage temperature range (preliminary)	-30°C to 90°C (-22F° to 194°F)

POWER SUPPLY

Power source	Included power supply, PoE(+,++), Omnidots Battery.
Power input range	5V - 57V DC
Power consumption	25mW sleeping, 1W idle, 3W active, 6W max

CALIBRATION

Field calibration	Any standard field calibrator for 1/2" microphones compatible. (94 dB field calibrator)
Periodic testing	Recommended biennial (every two years) Calibration and service available at an Omnidots calibration facility

INTERFACE

Status display	5 individually controlled LEDs

DIMENSIONS

Dimensions	214 x 94 x 55 mm (8.43 x 3.70 x 2.17 inch)
Weight	400 gr (14.1 oz)

MOUNTING OPTIONS

Pole mount	30mm - 140mm with band clamp included
Tripod or wall bracket	Universal 3/8" UNC connector

Generated at the 11th of April 2024, at 11:07:33pm, updated 13th of March 2025, at 03:49:23 pm