SNIFFER4D MINI2

Size
Ultra compact & lightweight structural design: 102*103*72mm
Weight
<300g
Water proof
IPX2
Structure
Injection molding with strong engineering plastic
Available parameters
Sense up to 9 gases at time, Available Parameters include: PM2.5, PM10, SO2, NO2, O3, CO, VOCs, CxHy/CH4/LEL, H2S, O2, NH3, HCl, HCN, HF, H2, Cl2, PH3, NO, CO2, OU (Odor)
Active air intake system
With the active air intake system, the air intake volume is approx. 5L/min flow rate when subject to zero additional resistance. The active air intake can be easily connected to a tube with an inner diameter of 6~10mm. When connecting to a sealing cap, the air outlet can connect to a tube with an inner diameter of 4~8mm.
Power supply
DJI M30 PSDK Power Port (Specific power cable required).
ARM CPU
32 位 1GHz ARM CPU and 512MB RAM.
Status LEDs
6 LEDs indicating Sniffer4D Mini2's working status: sensor assembly, GNSS, SD card, LTE, aircraft communication, and external device.
Built-in 4G
Built-in LTE connectivity with no external antenna. Support global 4G, 3G, EDGE, and GPRS network. A NanoSIM card needs to be provided by the user.

PSDK
Fully support DJI Payload SDK (PSDK) . The user can view Sniffer4D's real-time data or control Sniffer4D using DJI Pilot App running on the DJI remote controller.
Plaintex data output
• Real-time encrypted data transmission (1Hz) with data retrieval algorithm. The data retrieval function allows storing up to 9h of data when communication is lost, and the data can be automatically retrieved after the communication is reconnected.
• Encrypted data output port (USB Type-C), allowing data transmission in user-specified communication channels (e.g. a private LTE network).
• Plaintext data output port (USB Type-C), enabling easy communication with other devices (e.g. a flight controller) for secondary development.
• Sniffer4D Mini2 supports real-time data forwarding to user-specified software platforms using MQTT protocol.
(4G internet connection required, please consult Soarability sales support engineer for more details.)

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metering and control

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Warning LEDs
• Four high-brightness RGB warning LEDs can be configured solid or blink. (Blink frequency adjustable).
• The LEDs can be configured to automatically
vary their colour according to the gas/PM concentrations
Swarm operation
Swarm supported. One or multiple Sniffer4Ds can communicated with one or
multiple PCs.
SD card
Support mission data backup with Sniffer4D's built-in SD card module, and the stored mission data can be read and analyzed in Sniffer4D Mapper
OTA firmware upgrade
Support Over-the Air (OTA) firmware update.
Real-time data
• Display real-time working status of Sniffer4D, including device name, GNSS satellite number, relative altitude,
volume of data to be retrieved. Control Sniffer4D Mini2's high-brightness warning LEDs, gas sampling module, and other functionalities. Retrieve unreceived data during communication breakdown. • Display real-time measurement values and their time series graphs.
Generate real-time 2D grid gas/PM concentration heat map. • Generate real-time 2D isoline gas/PM concentration heat map. • Generate real-time 3D point cloud gas/ PM concentration heat map
Video streaming
Display real-time aircraft camera view
and save geo-tagged screenshots ("Video)
Real-time estimation of FSC
Estimate Fuel Sulfur Content (FSC) using proprietary inversion algorithm. (cost separately)

Import data files
Support loading multiple historical data files into the software for post analysis
Import Orthophoto
Support loading an orthophoto (GeoTiff, WGS84) and displaying it under the concentration heat maps. Live orthomaps are updated in real time
Import geo tagged photos
Support loading geo-tagged photos and showing their locations in the concentration heat map.
PDF mission report
Support automatic PDF mission report generation.
CSV datasheets
Support exporting mission files as a CSV datasheet.
One-to multiple ends
Track and display multiple Sniffer4Ds simultaneously.
Module calibration
Display the detailed working status of internally-mounted sensing modules inside
the Sniffer4D. The user can calibrate the sensitivity (slope) and zero point (intercept) of each module.
UDP data output
Output decoded Sniffer4D data (json) using UDP.
Software upgrade
Unlimited software installations and automatic software updates.

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