



BRAMC BR-A18 6-in-1 Desktop Air Quality Monitor PM1.0, PM2.5, PM10, Formaldehyde (HCHO), CO2, VOCs



Model: BRAMCA18
Manufacture warranty: 12 months
Country of Origin: China

Product Overview

BR-A18 desktop 6-in-1 air quality monitor is a real-time air quality monitoring instrument used to detect PM1.0, PM2.5, PM10, carbon dioxide (CO2), formaldehyde (HCHO) concentration and VOCs in the indoor environment. This product uses high-precision sensor chip and operation, will convert PM1.0, PM2.5, PM10, CO2, formaldehyde and VOCs concentration in the air into visual data, to monitor the air quality, provide effective protection for family health.

Scope of application

Any indoor environment, such as inside the house, warehouse, factory, office, and any indoor environment.





Product Highlights

- PM particulate matter measurement** — air quality monitor can test indoor fine particle pollution. 6-channel tiny particle number testing (Number of particles / liter)— $\mu\text{m}0.3$ / $\text{pm}0.5$ / $\text{PM}1.0$ / $\text{PM}2.5$ / $\text{PM}5.0$ / $\text{PM}10$; 3-channel particulate matters quality detection ($\mu\text{g} / \text{m}^3$)— $\text{PM}1.0$ / $\text{PM}2.5$ / $\text{PM}10$
- Data logger & export** — air quality tester has a 128M data storage card that can store 10w + data records, and supports data export to the computer in TXT file and analyze air quality changes in graphs.
- Automatic photosensitive** — BR-A air quality analyzer automatically turns off the screen according to the ambient brightness, creating a good sleeping environment, saving energy and electricity.
- High Accuracy** — Laser particle sensor to accurately distinguish 0.3 fine particulate matter; Electrochemical sensor to resolve 0.001mg/m³ of free formaldehyde molecules; Semiconductor TVOC total volatile organic compounds sensor can measure a variety of chemistry pollution such as benzene, toluene; NDIR non-spectral infrared principal CO₂ sensor to accurately detect indoor carbon dioxide concentration.
- Air quality alarm** — Desktop air quality detector with touch button, automatic detection at start-up, and drawing a 24-hour air quality data change curve; Comprehensive assessment of ambient air quality, air quality alarms base on US standards, keep track of the air quality around you at all times and places to alert you to allergies, asthma, sleep and other health problems

- Inspection of air equipment purification efficiency** — BR-A air quality analyzer can check the air quality to evaluate the purification efficiency of the filter of your purifier and ventilator and to remind you to replace the filter element.





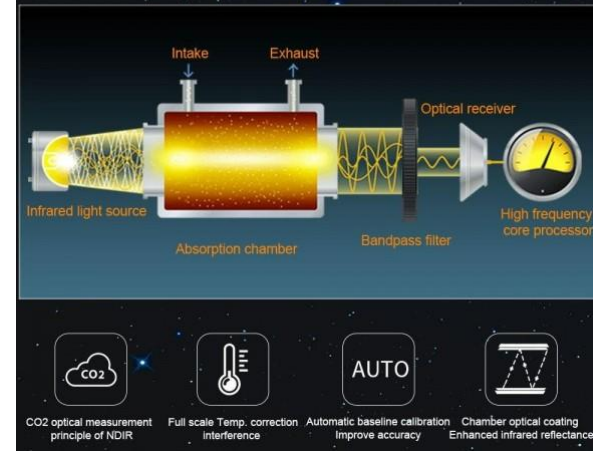
Product specifications

- **PM1.0, PM2.5 and PM10** using light scattering measurement method
 - Measuring range: 0 to 999 $\mu\text{g}/\text{m}^3$
 - Resolution: 1 $\mu\text{g}/\text{m}^3$
 - Accuracy: $\pm 15\%$ of reading or $\pm 20\mu\text{g}/\text{m}^3$
- **Formaldehyde (HCHO)** using electrochemical sensor measurement method
 - Measuring range: 0 to 1.000 mg/m^3
 - Resolution: 0.001 mg/m^3
 - Accuracy: $\pm 20\%$ of reading or $\pm 0.03\text{mg}/\text{m}^3$
- **Carbon Dioxide (CO2)** using NDIR measuring method
 - Measuring range: 400 to 5000ppm
 - Resolution: 1ppm
 - Accuracy: $\pm 15\%$ of reading or $\pm 45\text{ppm}$
- **TVOC** using semiconductor sensor test
 - Measuring range: 0 to 9.999 mg/m^3
 - Resolution: 0.001 mg/m^3
 - Accuracy: $\pm 20\%$ of reading or $\pm 0.3\text{mg}/\text{m}^3$
- Built-in Rechargeable Battery
- Power adapter:
 - Input voltage: AC220V, 50/60Hz, 0.45A
 - Rated output voltage: DC5 V
 - Rated output current: 500mA
- Dimensions: 110 x 97 x 57mm
- Weight: 262g


Environment for use

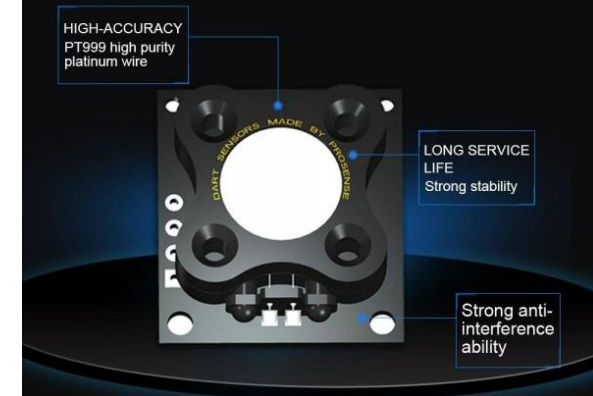
- Temperature range: 0 to 50 °C
- Humidity range: 0 to 90%RH
- Pressure: 1 standard pressure

NDIR non-dispersive infrared CO2 sensor



Dual platinum catalytic electrode technology

 Electrochemical formaldehyde sensor





6-channel particle number: PM0.3, PM0.5, PM1.0, PM2.5, PM5.0, PM10
 3-channel particle quality: PM1.0, PM2.5, PM10



TVOC sensor

Capturing subtle organic compound concentration changes



- | | | | |
|---------|---------|------------------|-----------------------|
| | | | |
| Ethanol | Ammonia | Hydrogen sulfide | Aromatic hydrocarbons |
| | | | |
| Esters | Benzene | Xylene | Nitrogen oxides |



Data export to Excel format

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Data:20220101	Time:0000	PM1.0:008	PM2.5:013	PM10:012	CO2:0419	HCHO:0.444	TVOC:0.464	>0.3DustNum:00177	>0.5DustNum:00059	>1.0DustNum:00037	>2.5DustNum:00002	>5.0DustNum:00000	>10DustNum:00000
2	Data:20220101	Time:0001	PM1.0:004	PM2.5:005	PM10:005	CO2:0422	HCHO:0.450	TVOC:0.467	>0.3DustNum:00975	>0.5DustNum:00266	>1.0DustNum:00024	>2.5DustNum:00002	>5.0DustNum:00000	>10DustNum:00000
3	Data:20220101	Time:0002	PM1.0:015	PM2.5:017	PM10:024	CO2:0418	HCHO:0.450	TVOC:0.464	>0.3DustNum:02199	>0.5DustNum:00631	>1.0DustNum:00033	>2.5DustNum:00004	>5.0DustNum:00000	>10DustNum:00000
4	Data:20220101	Time:0003	PM1.0:010	PM2.5:014	PM10:017	CO2:0418	HCHO:0.450	TVOC:0.464	>0.3DustNum:00195	>0.5DustNum:00065	>1.0DustNum:00040	>2.5DustNum:00002	>5.0DustNum:00000	>10DustNum:00000
5	Data:20220101	Time:0004	PM1.0:016	PM2.5:016	PM10:021	CO2:0418	HCHO:0.450	TVOC:0.467	>0.3DustNum:02514	>0.5DustNum:00768	>1.0DustNum:00021	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
6	Data:20220101	Time:0005	PM1.0:002	PM2.5:004	PM10:004	CO2:0417	HCHO:0.456	TVOC:0.471	>0.3DustNum:00417	>0.5DustNum:00120	>1.0DustNum:00020	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
7	Data:20220101	Time:0006	PM1.0:012	PM2.5:015	PM10:020	CO2:0424	HCHO:0.456	TVOC:0.468	>0.3DustNum:00492	>0.5DustNum:00142	>1.0DustNum:00029	>2.5DustNum:00002	>5.0DustNum:00000	>10DustNum:00000
8	Data:20220101	Time:0007	PM1.0:004	PM2.5:006	PM10:006	CO2:0419	HCHO:0.452	TVOC:0.464	>0.3DustNum:00777	>0.5DustNum:00204	>1.0DustNum:00023	>2.5DustNum:00002	>5.0DustNum:00002	>10DustNum:00000
9	Data:20220101	Time:0008	PM1.0:009	PM2.5:011	PM10:011	CO2:0421	HCHO:0.444	TVOC:0.461	>0.3DustNum:02343	>0.5DustNum:00738	>1.0DustNum:00021	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
10	Data:20220101	Time:0009	PM1.0:012	PM2.5:012	PM10:010	CO2:0418	HCHO:0.444	TVOC:0.461	>0.3DustNum:02814	>0.5DustNum:00825	>1.0DustNum:00032	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
11	Data:20220101	Time:0010	PM1.0:005	PM2.5:004	PM10:006	CO2:0418	HCHO:0.444	TVOC:0.461	>0.3DustNum:01107	>0.5DustNum:00279	>1.0DustNum:00017	>2.5DustNum:00002	>5.0DustNum:00002	>10DustNum:00000
12	Data:20220101	Time:0011	PM1.0:001	PM2.5:004	PM10:004	CO2:0418	HCHO:0.447	TVOC:0.465	>0.3DustNum:00648	>0.5DustNum:00175	>1.0DustNum:00021	>2.5DustNum:00006	>5.0DustNum:00000	>10DustNum:00000
13	Data:20220101	Time:0012	PM1.0:006	PM2.5:008	PM10:008	CO2:0415	HCHO:0.450	TVOC:0.470	>0.3DustNum:01227	>0.5DustNum:00340	>1.0DustNum:00020	>2.5DustNum:00006	>5.0DustNum:00000	>10DustNum:00000
14	Data:20220101	Time:0013	PM1.0:012	PM2.5:012	PM10:014	CO2:0418	HCHO:0.450	TVOC:0.462	>0.3DustNum:03171	>0.5DustNum:00922	>1.0DustNum:00045	>2.5DustNum:00002	>5.0DustNum:00000	>10DustNum:00000
15	Data:20220101	Time:0014	PM1.0:006	PM2.5:007	PM10:006	CO2:0418	HCHO:0.444	TVOC:0.461	>0.3DustNum:01107	>0.5DustNum:00322	>1.0DustNum:00017	>2.5DustNum:00002	>5.0DustNum:00000	>10DustNum:00000
16	Data:20220101	Time:0015	PM1.0:013	PM2.5:013	PM10:012	CO2:0420	HCHO:0.444	TVOC:0.458	>0.3DustNum:02946	>0.5DustNum:00866	>1.0DustNum:00041	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
17	Data:20220101	Time:0016	PM1.0:016	PM2.5:017	PM10:022	CO2:0417	HCHO:0.438	TVOC:0.455	>0.3DustNum:02673	>0.5DustNum:00826	>1.0DustNum:00040	>2.5DustNum:00002	>5.0DustNum:00000	>10DustNum:00000
18	Data:20220101	Time:0017	PM1.0:004	PM2.5:003	PM10:004	CO2:0414	HCHO:0.438	TVOC:0.455	>0.3DustNum:00825	>0.5DustNum:00241	>1.0DustNum:00020	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
19	Data:20220101	Time:0018	PM1.0:003	PM2.5:005	PM10:004	CO2:0414	HCHO:0.438	TVOC:0.458	>0.3DustNum:00687	>0.5DustNum:00182	>1.0DustNum:00014	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
20	Data:20220101	Time:0019	PM1.0:002	PM2.5:003	PM10:004	CO2:0416	HCHO:0.441	TVOC:0.458	>0.3DustNum:00561	>0.5DustNum:00131	>1.0DustNum:00010	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
21	Data:20220101	Time:0020	PM1.0:011	PM2.5:016	PM10:019	CO2:0416	HCHO:0.441	TVOC:0.458	>0.3DustNum:02001	>0.5DustNum:00600	>1.0DustNum:00030	>2.5DustNum:00002	>5.0DustNum:00000	>10DustNum:00000
22	Data:20220101	Time:0021	PM1.0:004	PM2.5:007	PM10:007	CO2:0416	HCHO:0.441	TVOC:0.452	>0.3DustNum:01221	>0.5DustNum:00370	>1.0DustNum:00032	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
23	Data:20220101	Time:0022	PM1.0:015	PM2.5:013	PM10:012	CO2:0419	HCHO:0.441	TVOC:0.455	>0.3DustNum:02976	>0.5DustNum:00870	>1.0DustNum:00026	>2.5DustNum:00006	>5.0DustNum:00002	>10DustNum:00000
24	Data:20220101	Time:0023	PM1.0:005	PM2.5:005	PM10:005	CO2:0416	HCHO:0.438	TVOC:0.455	>0.3DustNum:01140	>0.5DustNum:00325	>1.0DustNum:00015	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
25	Data:20220101	Time:0024	PM1.0:001	PM2.5:002	PM10:002	CO2:0423	HCHO:0.438	TVOC:0.455	>0.3DustNum:00501	>0.5DustNum:00121	>1.0DustNum:00018	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
26	Data:20220101	Time:0025	PM1.0:005	PM2.5:006	PM10:006	CO2:0420	HCHO:0.438	TVOC:0.455	>0.3DustNum:01227	>0.5DustNum:00352	>1.0DustNum:00025	>2.5DustNum:00002	>5.0DustNum:00000	>10DustNum:00000
27	Data:20220101	Time:0026	PM1.0:005	PM2.5:006	PM10:006	CO2:0417	HCHO:0.438	TVOC:0.455	>0.3DustNum:00924	>0.5DustNum:00293	>1.0DustNum:00020	>2.5DustNum:00002	>5.0DustNum:00000	>10DustNum:00000
28	Data:20220101	Time:0027	PM1.0:004	PM2.5:004	PM10:004	CO2:0418	HCHO:0.438	TVOC:0.455	>0.3DustNum:00933	>0.5DustNum:00250	>1.0DustNum:00021	>2.5DustNum:00002	>5.0DustNum:00000	>10DustNum:00000
29	Data:20220101	Time:0028	PM1.0:002	PM2.5:004	PM10:004	CO2:0418	HCHO:0.438	TVOC:0.455	>0.3DustNum:00588	>0.5DustNum:00147	>1.0DustNum:00025	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
30	Data:20220101	Time:0029	PM1.0:001	PM2.5:004	PM10:004	CO2:0417	HCHO:0.438	TVOC:0.455	>0.3DustNum:00306	>0.5DustNum:00102	>1.0DustNum:00023	>2.5DustNum:00000	>5.0DustNum:00000	>10DustNum:00000
31	Data:20220101	Time:0030	PM1.0:008	PM2.5:010	PM10:017	CO2:0415	HCHO:0.438	TVOC:0.461	>0.3DustNum:01206	>0.5DustNum:00343	>1.0DustNum:00016	>2.5DustNum:00002	>5.0DustNum:00000	>10DustNum:00000