Due to increasing air quality level requirements, air and gas particulate matter sensing has become an ever-growing market, particularly in semiconductor, indoor depollution and automotive applications.

Only a few well-known companies share this market, which is worth more than $100 million today. Many products have already been released in different applications, for different particle sizes.

However, these particle sensors must respect dimensional constraints to be integrated into other systems. They must operate for years without maintenance and have a reasonable selling price to reach as many areas as possible.

In this comparative report, System Plus Consulting analyzes seven particle sensors from the top main manufacturers: Honeywell’s HPMA115S0-XXX, Nova Fitness’ SDS011, Plantower’s PMS 7003, Sensirion’s SPS30, Sharp’s GP2Y1010AU0F, and Shiyei Technology’s PPD42NJ and PPD71.

In this analysis technical choices made by manufacturers are highlighted, at the printed circuit boards, electronic components and hardware levels. Block diagrams help readers to understand the component functions and the mechanical design. Different tables compare the common chipsets and main parts identified, their respective costs. Then, combined with manufacturing hypotheses, a manufacturing price is estimated for each system.

For further details on gas and particle sensors market and technology, consult Yole Développement’s linked report.
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**LINKED REPORT**

Gas and Particle Sensors 2018 – Air quality is breathing life into the sensor market!

*Market and Technology Report by Yole Développement*

Bundle offer possible with the *Particle Sensor Comparison 2019*, contact us for more information at sales@systemplus.fr.
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