

# BMP Tester

**BMP Tester** is an innovative and fully-automatic platform designed and produced by AMBRA Sistemi s.r.l. in order to evaluate the Bio Methanogen Potential (BMP) of several biomasses subject to anaerobic digestion.

The expandable architecture allows to collect up to 8 units between Digester boards, each of which includes 8 batch digesters, and continuous digesters produced by third parts.



**BMP Tester** is made up of three elements:

- **SW BMP Tester:** a Windows software application manages all the configuration and operating functions of the platform and a database containing partial and final test results and configuration parameters. Alphanumerical and graphical user interfaces allow accessing and elaborating the test results. Export functions are also available in order to transcode the database in Excel format and use them offline.
- **Control board:** it includes a complex sampling circuit with pump, moisture scrubber, filters, CH<sub>4</sub>, CO<sub>2</sub>, O<sub>2</sub> and H<sub>2</sub>S analyzers, moisture and temperature transducers and hot-wire mass flow controller.
- **Digester board:** it is completely made in stainless steel and includes 16 HDPE reactors bottles of 5lt/each, mixed by a fully programmable automatic shaker system. Each digester board includes 16 sample bags (gasometers) equipped with proximity sensors to identify the full status and to start the automatic sampling.

All the elements of the platform exchange data and receive commands from the SW application through RS485 interface and ModBus /RTU protocol.

Software BMP Tester can be customized in function of specific requirements.

The fully automatic sampling and analysis system ensures reliable and repetitive results, by excluding possible human errors.

Immediately after the load of new biomass, system performs automatic washing cycles with nitrogen in order to speed up the establishment of the anaerobic conditions.

**BMP Tester** is the best solution for laboratory and a support for research.

For further information please visit our website: [ambrasistemi.it/products/Biogas](http://ambrasistemi.it/products/Biogas)