

## Biobox 500

Technical Product Note

**Biobox 500** is Galileo Technologies' innovative design for Biogas upgrading and compression in a single skid, scalable and plug-and-play. It is an integrated package, with a total installed power of 300 HP, which includes an MX400 reciprocating compressor developed and manufactured by Galileo, heat exchangers, activated carbon towers for the adsorption of hydrogen sulfide, siloxanes, VOCs (volatile organic compounds), and other harmful compounds and a membrane system.

This system utilizes polyimide hollow fiber membranes, with low permeability for methane and high permeability for CO<sub>2</sub>. The methane recovery is over 99%. Product gas contains less than 2% of CO<sub>2</sub>. The system is designed to compress the gas up to 250 bar (3600 psig), producing Bio-CNG, at a maximum flow rate of approximately 265 Nm<sup>3</sup>/h (165 scfm).

The skid dimensions are 14.5 meters (47.5 ft) long, 2.4 meters (7.9 ft) wide, and 2.8 meters (9.2 ft) high, and in its entirety weighs about 30 tons.



