

July 2009: BIRO-AIR Energy deploys its extremely compact birotoric wind turbines.

BIRO-AIR Energy from Sarnia, Ontario (www.biroair.com) starts to deploy series of its revolutionary birotoric horizontal axis wind turbines. The wind turbine is mounted with 2 sets of contra-rotating blades, one set connected to the rotor and the other one connected to the stator of the alternator. Thus, the alternator sees a rotational speed that is twice the value of a traditional wind turbine with only one rotor and delivers a much higher power in spite of a reduced weight and volume. BIRO-AIR uses the frameless alternator ALXION 300STK4M delivering 6.6 KW at 350 rpm while the rotor speed is 175 rpm only. In a conventional structure with only one rotor and fixed statoric armature, the same alternator delivers 2.7 KW at 175 rpm. Hence, the power gain is huge; a high power is supplied from low windspeed and the total turbine weight is 425 pounds only.

