

# Determination of Wind Characteristics for Different Heights Based on Digital Maps of the Wind Potential of the Republic of Moldova

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## Abstract

The paper presents the calculation method for determining the wind characteristics for different heights based on developed digital maps of wind energy potential. Data on wind characteristics determined from digital maps of wind energy potential that are developed only for heights of 50 and 100 m above ground level are used to calculate wind parameters: average wind speed, wind power density and coefficients of the Weibull analytical approximation A and k, for any height between 10 and 150 m. The obtained data can serve as input data for the calculation of electrical or thermal energy production by a wind turbine.

**Keywords:** *wind potential, average wind speed, wind power density, analytical Weibull approximation, calculation method*

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