



TUGE 50

DATASHEET

TUGE 50 is a Class 1 small wind turbine designed and produced in Estonia.

Our competitive advantage is extra safety combined with minimal maintenance and high return on investment.

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OPERATING PARAMETERS

Maximum power	50 kW
Nominal rpm	52
Nominal wind speed	11 m/s

DIMENSIONS

Hub height	36 m
Rotor diameter	16 m
Rotor area	200 m²

ENVIRONMENTAL CONDITIONS

Active wind range	3-25 m/s
Survival wind speed	50 m/s
Operational temperature	-25...+60°C

CONTROL

stall, electromechanic rotor brake, tip-brake, active yaw, motorstart

BLADES

from fiber glass with tip-brakes by Olsen Wings

ROTOR BRAKE

fail-safe electromechanic caliper brake by KTR

YAW

electric slew drive system with encoder by IMO

GENERATOR

2 asynchronous generators of 11 and 45 kW by VEM for optimal efficiency

GRID CONNECTION

TMC3 controller with online SCADA, thyristor coupling and reactive power compensation by Orbital

TOWER

steel tower in 3 parts with outside ladder and service platform

MAINTENANCE

once in every five years due to automatic lubrication system by SKF

STANDARDS

designed as Class 1 per IEC61400-2

M / S	KW	KWH
5	8.2	93 187
6	15.6	133 036
7	23.5	168 155
8	29.9	198 322
9	34.4	220 128
10	41.4	235 347
11	45.2	242 152
12	46.4	244 133