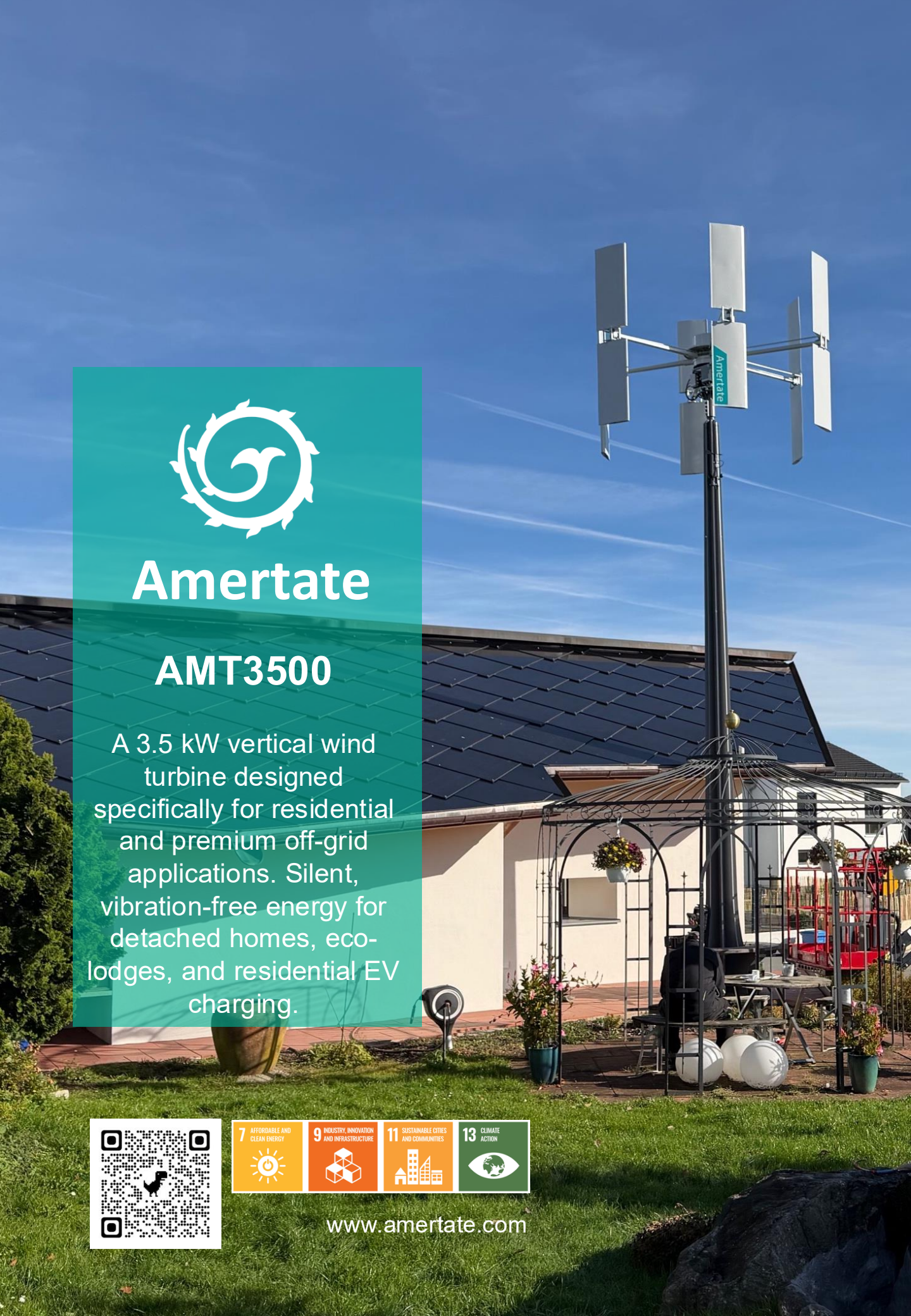


Amertate

AMT3500

A 3.5 kW vertical wind turbine designed specifically for residential and premium off-grid applications. Silent, vibration-free energy for detached homes, eco-lodges, and residential EV charging.

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Third-party verified quiet operation

Ultra-quiet operation ensures no disturbance in the environment.

Residential Suitability

Safe, low-speed operation is ideal for populated surroundings.

Improved Start-up, Smaller Battery Bank

Generates energy even in low wind (2 m/s), ensuring consistent power supply.

Self-Adaptive Blades

Getting advantage of sailing effect, maximizes energy efficiency.

Extended Lifespan & Cost Efficiency

Low-speed, high-torque operation offering low LCOE* and durability.

Fully Recyclable Hardware

Promotes sustainability with eco-friendly, recyclable materials.

Three Operational Modes

Flexible mode (optimal, storm, stop) for safety and reliability in varying weather.

Climate Adaptability

Reliable performance in harsh weather conditions.

Solar & Battery Compatibility

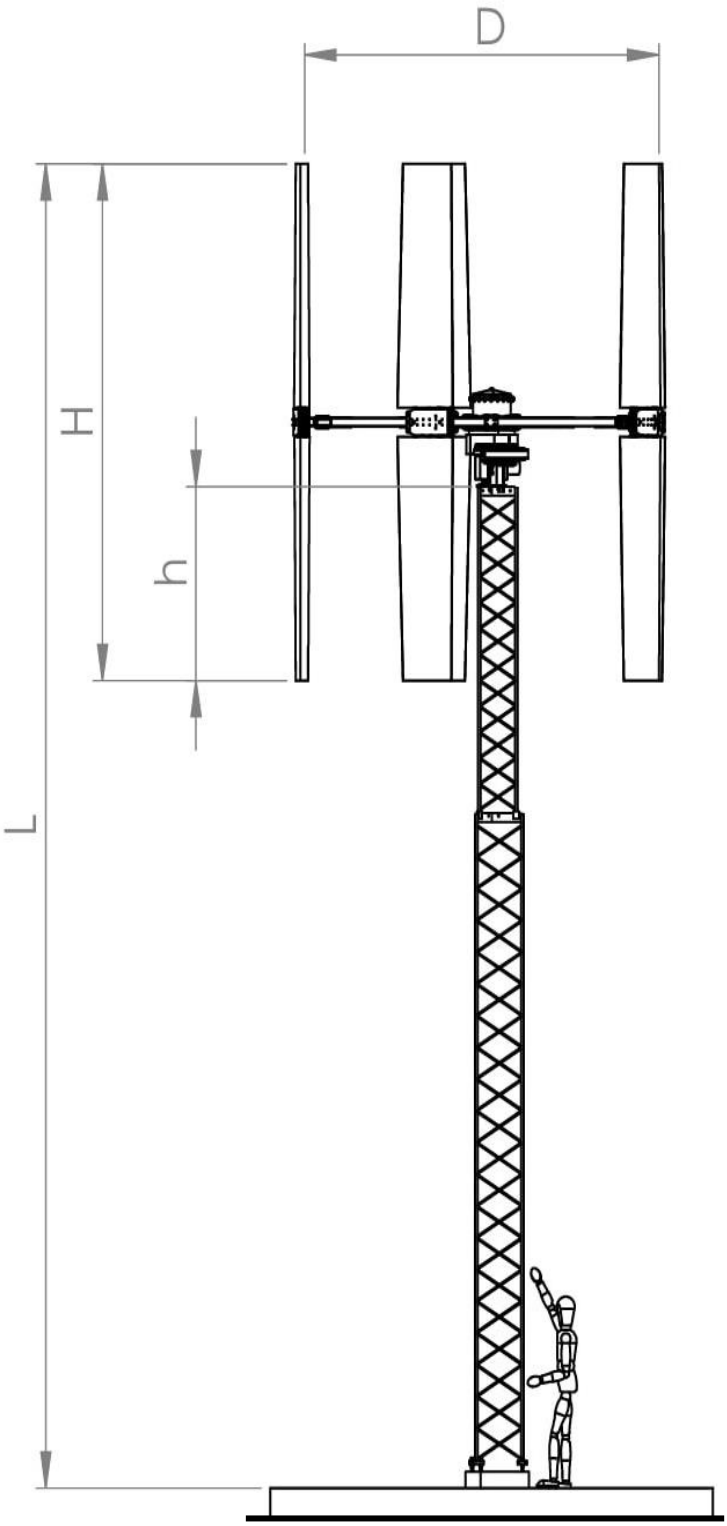
Integrates with solar panels, batteries and microgrids for greater independence.

*LCOE: Levelized cost of electricity.

OTAKAARI 5 A, 02150, ESPOO, FINLAND
V1-0 | 16 Oct 2026
Specifications are subject to change.

Turbine Specifications

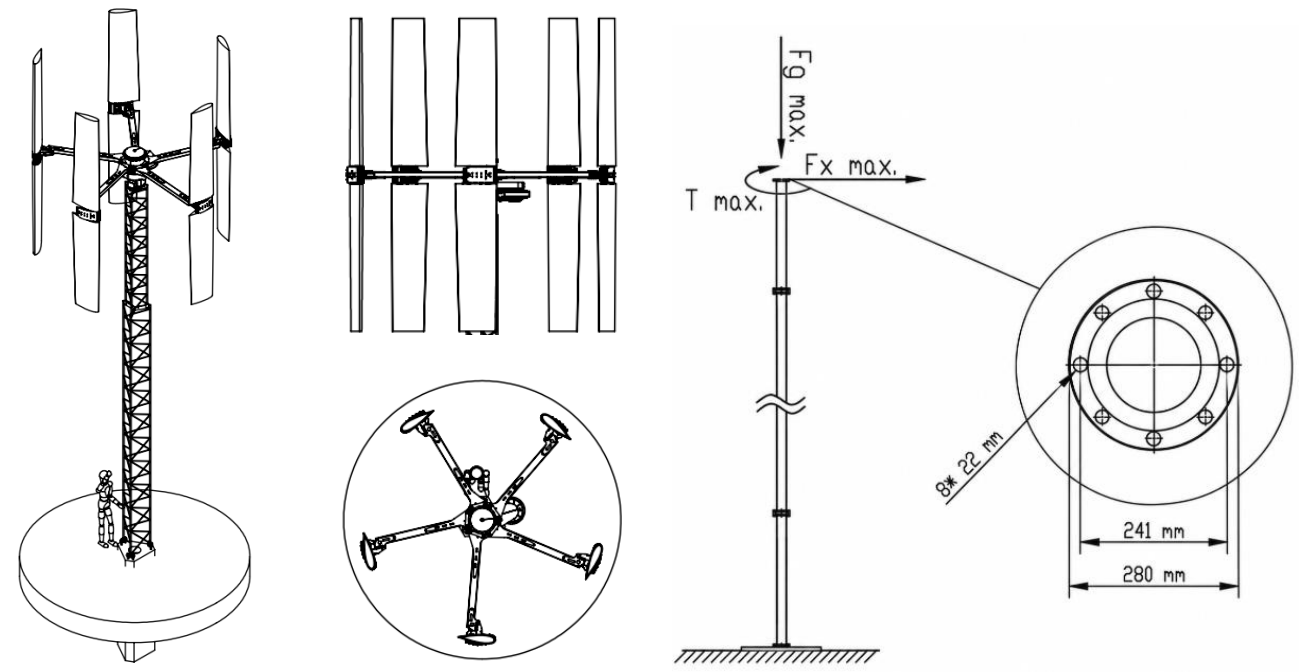
RATED POWER	3.5 kW
Annual production in 50% capacity factor and 6 m/s average wind speed	15.5 MWh
Rotor Diameter	D = 3 m
Rotor Height	H = 3.5 m
Turbine Weight	400 kg
Flange to Bottom of Blades (h)	130 cm
Start-up Speed	1.5 m/s
Rated Wind Speed	12 m/s
Storm Mode	16 – 26 m/s
Survival Wind Speed	60 m/s
Rotation Speed Max	80 rpm
Sound Level, IEC 61400-11, Third-party verified	No Noise at 17 m
Generator	Permanent Magnetic
Temperature Range	-35°C to +70°C
Voltage	Project-specific — On/Off-grid | 48–400 V DC battery | 220 V 1-phase / 380 V 3-phase AC
Turbine Warranty	4 Years



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Installation & Design Loads



Design Loads

Specified design loads applied at the top of the 10-meter mast for the AMT3500 (3.5 kW) vertical axis wind turbine:

Forces	Operation	Operational gust	Survival
Fg Max.	6.1 kN	6.1 kN	6.1 kN
Fx Max.*	1.2 kN	5.7 kN	9 kN
T Max.	0.5 kNm	3.6 kNm	13.5 kNm

Maintenance: The maintenance schedule is supplied with the turbine.

* Fx Max. depends on the installation location and requires final confirmation before ordering equipment.

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Equipment and Optional Accessories

1 **Amertate Turbine**

Turbine with blades, hub and necessary parts.

2 **Pole - Mast**

Depends on site conditions.

3 **Electrical Equipment**

Depends on off-grid or on-grid. May include inverter.

4 **Generator**

A permanent magnet generator.

5 **Sensors**

Wind speed, wind direction, vibration sensor.

6 **Optional Accessories**

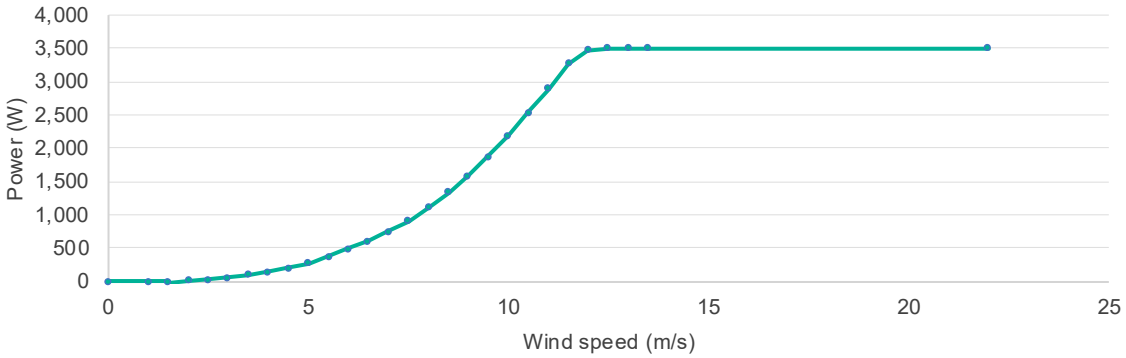
Weather stations and extra environmental sensors are available upon request.

7 **Data Reporting**

Wind, power, and optional sensor data are accessible on the turbine portal.



AMT3500 Power Curve



Wind speed (m/s)	Power (W)	TURBINE. RPM	GENERATOR. RPM	GENERATOR. VAC
0	0	0	0	0
1	0	5	23	36
1.5	0	10	42	57
2	18	12	51	72
2.5	35	15	65	92
3	61	17	79	113
3.5	96	20	89	129
4	146	23	108	150
4.5	204	26	117	166
5	280	29	131	186
5.5	373	33	150	211
6	484	35	159	228
6.5	607	38	173	248
7	747	39	182	259
7.5	910	43	196	278
8	1114	46	210	299
8.5	1342	49	224	320
9	1593	52	238	340
9.5	1873	54	253	361
10	2188	59	267	377
10.5	2532	62	281	397
11	2893	64	290	414
11.5	3273	66	304	424
12	3471	69	318	435
12.5	3500	72	327	435
13	3500	73	332	435
13.5	3500	73	332	435
22	3500	73	332	435

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Local wind Energy. Powering energy independence.





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