

Introducing the microWindbelt™

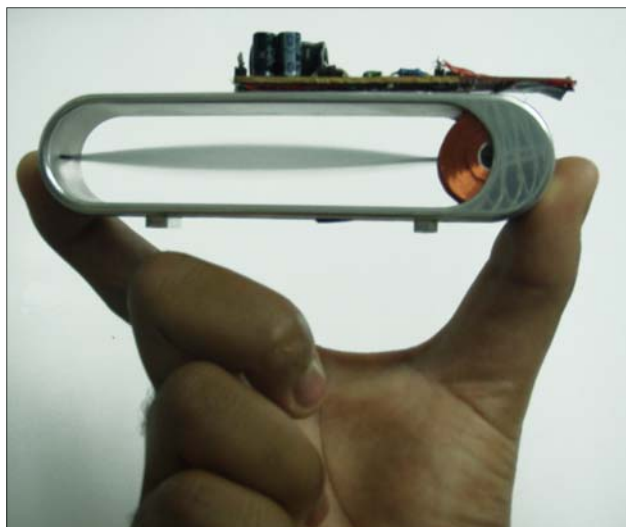
The world's first 'peel & stick' wind harvester powers a new world of information

Wind can now displace batteries.

For the first time, a wind energy harvester can power wireless sensors, opening up the industries of transportation, green buildings HVAC systems, urban air quality reporting, and infrastructure monitoring to truly wireless and battery-free information gathering.

The technology behind this new world of energy harvesting is Humdinger's microWindbelt™. Based on exciting developments in aeroelastic, non-turbine harvesters, the microWindbelt™ can continuously provide power to any application where air is flowing: under a vehicle, inside the ducting of a building, or at the out-flow of a factory.

Producing power in air flows as low as 3m/s, a microWindbelt™ the size of a cell phone provides a conditioned, buffered 3VDC supply to off-the-shelf Texas Instruments EZ430-RF2500 wireless sensor nodes, EnOcean nodes, and most any battery powered wireless application in fluid flow.



The microWindbelt™ uses aeroelastic flutter & vibration rather than a spinning turbine to make micro-wind harvesting possible at 10x the efficiency of turbine-based approaches ([Nature](#). Priya Nov. 8, 2005)

For more information, contact: Shawn Frayne, President
650.488.8013 (US tel.)
shawn.frayne (skype)
smf@humdingerwind.com

Power output @ 70 Hz, raw AC across load

Airflow speed	3.5 m/s	0.2 mW
	5.5 m/s	2.0 mW
	7.5 m/s	5.0 mW

Dimensions

Membrane length	12 cm
Membrane width	0.7cm
Casing	13cm x 3cm x 2.5cm

Other Information

Energy*	50 - 200+ Wh
Buffer	15mF Supercapacitor
Gearing	None
Transduction	Electromechanical

*20% capacity factor, 20 year lifetime

