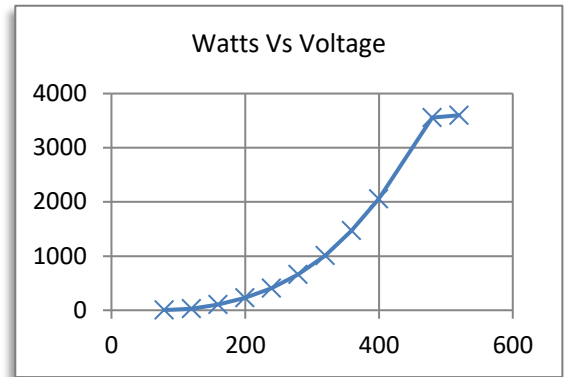


Inverter Control Unit

Power Curve Control

For turbine manufacturers with their own rectifier / dump load and turbine control, the Voltsys Inverter Control Unit allows any wind or hydro turbine to work with the wide range of Fimer ABB Solar inverters.

Wind and most hydro turbines need power extracted at different rates, depending on the RPM or turbine voltage. This is known as a power curve or power table and usually the ratio is non-linear as per the example graph on the right. In the past, wind inverters provided the ability to enter a power curve.



Inverters

The Voltsys Inverter Control Unit provides power curve control for Fimer/ABB solar inverters, including the Trio and Uno DM range of inverters.

This means that solar inverters can now be used as wind inverters. The load on the generator is increased based on a generator speed or DC voltage and that power is then exported to the grid by the inverter.



Monitoring

The control unit also provides data logging to a micro-SD card. Programming the power curve and other settings is done by loading a setup file on the micro-SD card and a USB port allows for monitoring turbine performance on a laptop.

Specifications

Model No	Inverter Control Unit
Turbine Input Voltage DC Max	875VDC
Generator Input Voltage Max AC	620V RMS 200Hz
Electrical Enclosure	IP40
DC Power Supply	12-24VDC (Consumption ~1W)
AC Power Supply (Supplied)	100-240VAC (PSU rating 0.88A)
Temp.	-10C ~ 40C
Weight	950g
Dimensions	H230xW195xD100 mm

Monitor	Power Table	Inverter	Serial	Notes
Index			1042	
Turbine DC Voltage (V)			0	
Turbine Frequency (Hz)			0.00	
Inverter Power (Watts)			341	
Inverter Address			2	
Inverter Status			6	
AC Voltage			234.50	
AC Current			1.12	
AC Frequency(Hz)			49.99	
Inverter Voltage			204.00	
Inverter Current			1.67	
Inverter Level			0	
StatusByte			193	