Vestas V52 – Dundalk Institute of Technology Ireland

SCADA data parameter description

Parameter	Description
Timestamps	*Time stamps in 10-minute intervals*
WindSpeed	*Average 10-minute wind speed (m/s)**
StdDevWindSpeed	*Wind speed standard deviation (m/s) in 10-minute period**
WindDirAbs	*Average 10-minute absolute wind direction (deg) **
WindDirRel	*Relative direction of nacelle with respect to WindDirAbs (deg)*
Power	*Average 10-minute power output (kW)*
MaxPower	*Maximum 10-minute power output (kW)*
MinPower	*Minimum 10-minute power output (kW)*
StdDevPower	*Power output standard deviation (kW) in 10-minute period*
AvgRPow	*Average 10-minute reactive power output (kVAR)*
GenRPM	*Electrical generator revs per minute (RPM)*
RotorRPM	*Wind turbine rotor revs per minute (RPM)*
EnvirTemp	*Environmental temperature outside of nacelle (^{o}C)*
NacelTemp	*Temperature inside nacelle space (^{o}C)*
GearOilTemp	*Gearbox oil temperature (^{o}C)*
GearBearTemp	*Gearbox bearing temperature (^{o}C)*
GenTemp	*Generator temperature (not active-999)*
GenPh1Temp	*Generator phase 1 winding temperature (^{o}C)*
GenPh2Temp	*Generator phase 3 winding temperature (^{o}C)*
GenPh3Temp	*Generator phase 3 winding temperature (^{o}C)*
GenBearTemp	*Generator bearing temperature (^{o}C)*

 * Measured by a 2-D ultrasonic Thies Clima anemometer that is located on the wind turbine nacelle