# Turbulent Flow Affecting Tidal Turbines

As the result of a collaborative study with Edinburgh University, UK, Nortek has developed a single beam profiler for the measurement of turbulent flow affecting underwater turbines.

When coupled with computer-controlled pan and tilt mechanisms, groups of Nortek single beam profilers can be focused on target points both in front of and behind the turbine. By synchronising the firing sequence of the profilers, 3D current measurements can be obtained at these focus points with sampling rates of up to 2Hz.

The same single beam profilers can also be fitted to the nose cone of any turbine, thus providing a continuous measurement of incoming current flow.

https://www.hydro-international.com/content/news/turbulent-flow-affecting-tidal-turbines