

GH Tidal Bladed Price List

GH Tidal Bladed is an integrated software package with a Windows-based graphical user interface which allows the user to carry out the full range of performance and loading calculations required for the design and certification of tidal current turbines. The software is supplied as a base module with a number of optional modules available to meet the specific requirements of each client.

Base Module

Provides a full hydroelastic model of a single rotor axial-flow tidal current turbine with multiple configuration options for all major components and systems including monopile and multimember offshore support structures attached to the seabed. The latter allows the user to specify an arbitrary 3D space frame support structure. To improve the modelling of pile foundations a 'P-Y' model is included, capable of modelling the non-linear stiffness of different soil strata at user-specified depths. Includes interface to an external user-defined controller, and models of electrical connection to the network. Comprehensive modelling of marine and wind environmental conditions, and calculation capabilities including modal analysis, steady state performance and loads, dynamic simulation of loading and response for all turbine states and fault conditions. The base module also provides powerful batch, post-processing, graphics and reporting facilities. Other device configurations not explicitly stated above can be incorporated following discussion with GH engineers.

Price: £30,000

Linearisation Module

Derives a linearised model of the tidal current turbine in state space form. The linearised model may be calculated for a series of operating points and output in a form suitable for controller design using, for example, MATLAB.

Price: £4,500

Seismic Module

Allows the full hydroelastic model of the tidal current turbine to be excited by ground motion corresponding to an earthquake. Synthetic or measured earthquake events can be used as input and the resulting loads calculated taking full account of non-linear effects, such as the interaction of the turbine control and safety system and the rotor hydrodynamics.

Price: £3,000

Hardware Test Module

Provides the capability for real time simulation so that GH Tidal Bladed can be used as a virtual tidal current turbine for the testing and commissioning of controller hardware. The module also offers interactive controller test plan creation and management, and automated test report generation.

Price: £14,000*

* This price excludes customisation of the controller test module to meet client specific requirements.
All prices are exclusive of VAT and are subject to our standard terms and conditions.

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Documentation

GH Tidal Bladed is supplied complete with comprehensive documentation consisting of on-line help, user manual and theory manual.

Language

The software and the documentation are supplied in English.

Discounts

Additional copies of GH Tidal Bladed are available at a discount. Please contact us concerning special rates for multiple copy or network options.

Training, Support and Upgrades

All software modules will be supported by expert staff on a full time basis.

Free on-line technical support for 12 months is included with the purchase of GH Tidal Bladed. During this period any upgrades will be made available to the user free of charge. Further technical support and upgrades to the software are available for an annual fee of 12.5% of the list price.

Full training in GH Tidal Bladed is available and can be tailored to meet your needs.

Delivery (free)

The software is delivered to you free of charges for transportation, packaging and insurance. Any taxes or fees that may be levied by your government for the import of the software have to be paid by you or your import agent. Any taxes or fees levied by the government of the United Kingdom on the export of the software will be paid by us.

More Information

Futher details about GH Tidal Bladed are available from: www.garradhassan.com/products/ghbladed/tidal.php

A demonstration version is available on request by email to: bladed@garradhassan.com

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GH TIDAL BLADED ORDER FORM

Please send this form by email, post, or fax to the address below. Orders will be processed on receipt of payment.

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 Website: www.garradhassan.com

Product/Module	Cost per copy	Number of copies*	Cost
Base Module	£30,000		
Linearisation Module #	£4,500		
Seismic Module #	£3,000		
Hardware Test Module †	£14,000		
# Requires the Base Module			
* See section on discounts			
** All prices are exclusive of VAT and are subject to our standard terms and conditions.	VAT if applicable **		
† This price excludes customisation of the controller test module to meet client specific requirements.	TOTAL COST:		

April 2009

Payment either by cheque with your order in GBP, made payable to Garrad Hassan and Partners Ltd, or by bank transfer to: HSBC Bank plc, 2 Cannon Street, Bedminster, Bristol BS3 1BW, United Kingdom; Sort code: 40-05-15, Account number: 35452796, Swift code: MIDLGB22, Account name: Garrad Hassan and Partners Ltd. IBAN: GB92 MIDL 4005 1535 4527 96

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Please provide the name and email address of your software Licence Form signatory, if different from above.

Name of signatory Email