

**TUFLOW PRODUCTS SOFTWARE LICENCE AGREEMENT
SCHEDULE B (FG-GBP): TUFLOW FIXED GRID MODELLING
GBP PRICE LIST
July 1st, 2019**

Please contact sales@tuflow.com for a written quote. To help us assist you, please specify any preferences you have on:

- Whether a Perpetual, Yearly Subscription, Monthly Rental or Cloud Service purchase.
- Lock Type (Hardware or Software).
- Licence Type (Local or Network) and number of licenses (1, 2, 4 etc).
- Any optional modules (M2D, AD or GPU Hardware) and number of module licences.

Purchase Options:

Licences can be purchased as:

- **Perpetual:** Indefinite expiry date plus an optional annual software upgrade and support fee.
- **Yearly Subscription:** One year expiry and one year of software upgrades and support.
- **Monthly Rental:** Rent licences month by month.
- **Cloud Simulation Service:** TUFLOW licence plus hardware at an hourly rate.

Lock Types:

TUFLOW Products are licenced via locks, available in two forms:

1. **Hardware Lock:** Licences are assigned to a dongle (e.g. USB lock) that can be attached to any computer. Licences on the Hardware Lock can be updated at any time (for example, to upscale with rental or additional new perpetual licences).
2. **Software Lock:** Licences are assigned to a computer. Perpetual Licence Software Locks have a one year expiry that are annually updated at no cost. Interim licence updates prior to the one year reset are not possible for Software Lock licences (for example, upscaling with additional rental licences is not possible). Software Locks are recognised by the 2017 Release onwards.

Licence Types:

1. **Local Licence:** TUFLOW simulations can only be run on the computer hosting the Lock.
2. **Network Licence:** The Lock is hosted on any computer (e.g. a server). Other computers check out licences from the host computer via the local area network (LAN).

How many simulations can be run at the same time?

The number of licences reflect how many TUFLOW simulations can be run in parallel at any given time. For example, a Local 4 can run 4 simulations at the same time on the one computer. A Network 5 allows up to 5 simulations at any one time across an organisation's LAN. If all licences are in use when a TUFLOW simulation starts, the simulation enters a holding pattern until a free licence is available.

Are there ongoing costs?

Yes, if you wish to access our support services and keep your perpetual licence maintained to access the latest software upgrades and releases, an annual invoice for 15% of the value of your perpetual licences is issued in June of each year. At the time of the initial purchase, the annual fee is pro-rated to next June.

Are discounts available for multiple licences?

Our price structure heavily discounts purchases of multiple licences. The more licences you own, the cheaper the per licence rate. In addition, a discount is provided for multiple Local Licences of the same product by the same Licensee (i.e. one point of contact for all invoicing).

What TUFLOW functionality is included?

A TUFLOW licence is 1D and 2D enabled, and includes both an implicit (Classic) and the **new explicit (HPC) solver**. All the 1D and 2D functionality listed below are included with a standard licence. Multiple 2D Domains (M2D), Advection-Dispersion (AD) and access to GPU Hardware are not included – refer to the Optional Modules Section for information on these advanced features.

- Unlimited 1D elements, including open channels, structures, pipes, pits, and manholes.
- Wide range of structures including culverts, bridges, weirs, gates, pumps and more.
- Advanced stormwater network features for modelling inlet pits, pipes, and manholes.
- Wide range of 1D and 2D boundary conditions.
- Powerful 1D operational controls for structures.
- Expansive model quality control check outputs.
- Wide range of output options, styles and formats.
- Unlimited 2D elements.
- TUFLOW Classic's 2D Implicit Solver.
- New HPC Heavily Parallelised 2D Solver on CPU (the GPU Module is needed to run HPC on GPU cards).
- Unlimited 1D/2D links for Classic and HPC Solvers.
- 2D direct rainfall functionality and time-varying spatial rainfall inputs (distributed hydrology).
- Several infiltration loss options including Green-Ampt.
- Dynamic embankment breaches.
- Flood evacuation route tracking.

TUFLOW Perpetual Licence Pricing (GBP)		
Perpetual Licences – TUFLOW Engine		
Item	Description	Perpetual Licence Price (GBP)
Local Licences Allows the Licensee to run one simulation per licence on the computer with the Lock.	Local 1 – Up to 1 Simulation	£3,650
	Local 2 – Up to 2 Simulations	£4,675
	Local 4 – Up to 4 Simulations	£5,725
	Local 6 – Up to 6 Simulations	£7,425
	Local 8 – Up to 8 Simulations	£9,375
	Local 12 – Up to 12 Simulations	£12,700
	Local 16 – Up to 16 Simulations	£15,125
	Other local lock options	Price upon request
	Additional Local Licence Locks: The price for each additional Local Licence Lock of the same product purchased by the same Licensee (i.e. same office and same organisation) is discounted. The largest discounts apply to the cheapest locks.	Price less discount of: - 10% for the 2 nd Local Lock - 20% for the 3 rd and subsequent Local Locks
Network Licences Allows multiple users and simulations across the licensee's local area network (LAN). Cloud Access Organisations with access to Cloud hardware may host Network Licences within their Cloud domain provided these licences are only available to users who have access to the Licensee's LAN. To host a Network Licence a Software Lock assigned to one of the Organisation's Cloud based virtual machines, is required.	Network 1 – Up to 1 Simulation	£5,500
	Network 3 – Up to 3 Simulations	£11,000
	Network 5 – Up to 5 Simulations	£14,525
	Network 8 – Up to 8 Simulations	£20,575
	Network 10 – Up to 10 Simulations	£23,600
	Network 15 – Up to 15 Simulations	£29,650
	Network 20 – Up to 20 Simulations	£35,700
	Network 30 – Up to 30 Simulations	£47,800
	Network 50 – Up to 50 Simulations	£72,000
	Network 75 – Up to 75 Simulations	£96,200
	Network 100 and above	£1,225 per licence
	Other network licence options	Price upon request
Additional Locks: Organisations who purchase a Network 20 or greater are entitled to a second Lock to distribute their Network licences. This provides contingency for host computer outages. Note that a request to reduce the number of licences on a lock may require the lock to be returned for re-coding as part of a redistribution.		

Note: For the 2017 TUFLOW release onwards, TUFLOW's HPC 2D Solver is parallelised allowing a single simulation to utilise more than one CPU thread (i.e. more than one CPU core) if not using GPU hardware. The maximum total threads activated by TUFLOW simulations is limited four times the maximum number of TUFLOW licences available across all accessible locks. For example, for a single Local 4 licence, which will have 16 local thread licences, allowable combinations are: 1 simulation utilising 16 cores; or 1 simulation using 8 cores and 2 simulations using 4 cores each; or 4 simulations each utilising 4 cores each.

TUFLOW Perpetual Licence Pricing (GBP)

Optional TUFLOW Modules

Computational Modules

Multiple 2D Domain (M2D) Module	Provides access to the TUFLOW M2D Module , which is presently only available for the Classic 2D Solver. Allows any number of 2D domains of differing cell size, orientation and dimension.	50% of the equivalent TUFLOW Licence Price
Advection Dispersion (AD) Module	Provides access to the TUFLOW AD Module , which is presently only available for the Classic 2D Solver for the simulation of conservative constituents.	100% of the equivalent TUFLOW Licence Price

The number of M2D and AD Modules licences on a lock can be the same or less than the number of TUFLOW licences. Additional Local Licences for the M2D and AD Modules are discounted at the same rates as for Additional Local Licence Locks. Modules can be purchased at a later date, and changes to Locks can be carried out remotely.

Example Module Price Calculation

Local 4 TUFLOW Licence + Local 1 M2D Module:

$$£5,725 + (0.5 \times £3,650) = £7,550$$

Hardware Modules

GPU Hardware Module	<p>Provides access to a GPU device for TUFLOW's heavily parallelised HPC 2D Solver, thereby substantially reducing simulation times.</p> <p>The number of GPU Hardware Module licences reflects the maximum number of GPU devices that can be accessed by a simulation.</p> <p>Note that for a GPU with dual cards, each card is treated as a separate device.</p>	<p>Local Licence: 50% of the TUFLOW Perpetual Licence price.</p> <p>No multiple Local Licence Lock discounts apply.</p> <p>Network Licence: 70% of the TUFLOW Perpetual Licence price.</p>
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GPU Hardware licences must be paired with at least one (1) TUFLOW Engine licence (page B-2). The number of GPU Hardware licences can be more or less than the number of TUFLOW Engine licences. For example:

- Two GPU Hardware licences paired with a single TUFLOW Engine licence allows access to two GPU devices on a computer by a single simulation (further reducing simulation times), or
- Two GPU Hardware licences paired with two TUFLOW Engine licences will allow two simulations with each simulation using one GPU device.

Modules can be purchased at a later date, and changes to Locks can be carried out remotely.

Example Module Price Calculation

Local 4 TUFLOW licence + Local 1 GPU Hardware Module:

$$£5,725 + (0.5 \times £3,650) = £7,550$$

Network 3 TUFLOW licence + Network 3 GPU Hardware Module:

$$£11,000 + (0.7 \times £11,000) = £18,700$$

TUFLOW Subscription and Rental Licence Pricing (GBP)

Yearly Subscription Licences

Yearly Subscription licences are available for purchase at 40% of the Perpetual Licence price (including one year's annual software upgrades and support fee). These licences give the user access to the software and TUFLOW Support for one year. A Yearly Subscription licence cannot be changed during the one year period, nor can other types of licences be added to the Lock with the Yearly Subscription licence, during the one year period. Should additional licences be required, these will need to be assigned to another Lock.

Example:

Local 1 TUFLOW Subscription Licence:
 $0.4 \times (\pounds 3,650 \times 1.15) = \pounds 1,679$

Monthly Rental Licences

Rental of Local and Network Licences on a monthly basis is available to existing TUFLOW Licensees.

Rental Price = R + NL

R = Number of months times 10% of the Purchase Price of the Perpetual Licence Price. A minimum of £300 applies.

NL = New Lock Purchase (if required) of £120. Hardware Locks may be retained indefinitely for any future rentals or purchases. Software Locks can be recoded for future purchases for the life of the computer. If the rental licensing is to an existing (non-Perpetual) Lock previously purchased by the Licensee, NL equals zero.

Monthly Rental Conditions:

- Rental of additional Network Licences are priced based on the price difference between the Licensee's Perpetual Network Licence and the value of the Perpetual + Rental Licences. For example, if the Licensee has a Network 10 and rents another 10 licences for one month, R would be equal to (Network 20 – Network 10) x 10%. i.e. $(\pounds 35,700 - \pounds 23,600) \times 0.10 = \pounds 1,210$
- Local Licences are not subject to the multi-Local Licence discounts.
- Licensees may purchase (at the cost of NL above), and retain indefinitely, Locks for Rental Licences.

Example:

2 Month Local 1 TUFLOW Rental:
 $2 \times (\pounds 3,650 \times 0.10) + \pounds 120 = \pounds 850$

Note: If renting for more than four (4) months, consideration should be given to a Yearly Subscription Licence.
Note: Perpetual and Rental Locks can be attached to the same computer to access licences from both Locks.

Cloud Simulation Service – Coming Soon

BMT will soon offer a Cloud Simulation Service for TUFLOW. The service is ideally suited to short term bulk simulations. For example, Monte Carlo simulations, where very large numbers of simulations are to be completed within a short timeframe.

For cloud based simulations, BMT will supply the TUFLOW licences, provide access to cloud hardware and run the simulations. Our Cloud Simulation Service is quoted at a per hour rate, which varies depending on the hardware, priority and order size. Upon ordering, we set up a Cloud service, then guide you through the process of uploading, batching the simulations and downloading the results.

To discuss options or for a quote, please contact sales@tuflow.com.

Annual Software Upgrades and Support Fee (GBP)		
Annual Software Upgrades and Support (Maintenance) Fee	<p>The annual software upgrades and support, or software maintenance fee provides access to new releases and software updates. It also grants the Licensee access to software support via support@tuflow.com.</p> <p>The fee is highly recommended for Perpetual Licences and is compulsory for Yearly Subscription Licences.</p> <p>For unmaintained Perpetual Licences a surcharge of 25% on all unpaid annual fees applies should annual maintenance be commenced or reinstated at a later date.</p> <p>There is no annual maintenance fee applied to monthly rental purchases.</p>	<p>15% of the TUFLOW licence value including any purchased modules.</p> <p>The first instalment is pro-rated to the end of next June using the following factors:</p> <p><u>Order Date:</u> Jul to Sep 0.75 Oct to Dec 0.50 Jan to Mar 0.25 Apr to Jun 1.00 (to June next year)</p> <p>Thereafter, an invoice is issued around June each year to cover software upgrades and support for the next 12-month period from July to June.</p>

Miscellaneous		
Academic Licence Discount	Licences and the annual software upgrades and support fee are discounted for academic institutions for non-commercial, educational use.	50% discount on Perpetual and Yearly Subscription Licences
Upgrade of an Existing Licence	<p>Upgrading a licence or licences is allowed if the upgraded licence(s) value is of similar or greater value than the existing licence(s).</p> <p>Local Licences can be converted to Network Licences and vice versa.</p>	<p>The difference in price between the two licences.</p> <p>(If upgrading from a Local Licence Lock the lowest priced Local Lock after any multi-licence discounts is used to calculate the difference.)</p>
Transfer or Replacement of an Existing Lock	<p>If a Lock becomes faulty through normal use, there is no replacement charge - please contact sales@tuflow.com.</p>	No Cost
	Damaged Hardware Locks that are returned and need to be replaced.	£120
	Software Locks that need to be transferred to another computer.	£60
Loss of an Existing Hardware Lock or Transfer of a Software Lock Not Possible	<p>The Licensee is responsible for taking out insurance against the loss, theft or disappearance of Hardware Locks, or if a Software Lock cannot be transferred (e.g. computer is stolen or no longer functional).</p> <p>The cost to replace a lost or stolen licence is equal to the Licence Fee of the TUFLOW Software payable at the time of the replacement of the lost Licence Lock.</p>	

This Price List is to be read in conjunction with the latest TUFLOW PRODUCTS SOFTWARE LICENCE AGREEMENT available from <http://www.tuflow.com/Prices.aspx>.

The applicable currency is the currency of the country of the Licensee's invoicing address. TUFLOW Prices are available in AUD, EUR, GBP and USD from <http://www.tuflow.com/Prices.aspx>. For countries, whose official currency is not accounted for by these currencies, the AUD rate applies unless otherwise quoted in writing.

Any applicable non-Australian government taxes are the responsibility of the Licensee.

BMT reserves the right to vary the Prices in this Schedule from time to time without notice to the Licensee.