

**TUFLOW PRODUCTS SOFTWARE LICENSE AGREEMENT
SCHEDULE B (FM-USD): TUFLOW FLEXIBLE MESH MODELLING
USD PRICE LIST
9th April 2024**

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).**
- **License Type (Local or Network) and number of licenses (1, 2, 4 etc).**
- **Any optional modules (GPU, AD, 3D, ST, PT or WQ) and number of module licenses.**

Purchase Options:

Licenses 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 licenses month by month.
- **Cloud Simulation Service:** TUFLOW FV license plus hardware at an hourly rate.

Lock Types:

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

1. **Hardware Lock:** Licenses are assigned to a dongle (e.g. USB lock) that can be attached to any computer. Licenses on the Hardware Lock can be updated at any time (for example, to upscale with rental or additional new perpetual licenses).
2. **Software Lock:** Licenses are assigned to a computer. Perpetual License Software Locks have a one-year expiry that are annually updated at no cost. Interim license updates prior to the one-year reset are not possible for Software Lock licenses (for example, upscaling with additional rental licenses is not possible). Software Locks are recognised by the 2019 Release onwards.

License Types:

1. **Local License:** TUFLOW FV simulations can only be run on the computer hosting the Lock.
2. **Network License:** The Lock is hosted on any computer (e.g. a server). Other computers check out licenses from the host computer via a company's network. There are no regional restrictions associated with Network licenses.

How many simulations can be run at the same time?

The number of licenses reflect how many TUFLOW FV 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 network. If all licenses are in use when a TUFLOW FV simulation starts, the simulation enters a holding pattern until a free license is available.

Are there ongoing costs?

Yes, if you wish to access our support services and keep your perpetual license maintained to access the latest software upgrades and releases, an annual invoice for 15% of the value of your perpetual licenses 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 licenses?

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

What TUFLOW functionality is included?

TUFLOW FV is the flexible mesh solver. It can be used to model domains comprising of a mesh of quadrilateral and triangular elements. Licenses are 1D and 2D enabled. 1D components in TUFLOW FV are presently limited to 1D culverts (full 1D functionality is available in TUFLOW's fixed grid solvers). TUFLOW FV functionality is expansive, using a 2D or 3D explicit finite volume (FV) solution scheme and supplemented with a range of structure options. Graphical Processing Unit (GPU), Advection-Dispersion (AD), Particle Tracking (PT), 3D, Sediment Transport (ST) and Water Quality (WQ) are available as optional modules- refer to the Optional Modules Section for information on these advanced features. Key features are:

- Unlimited 1D culverts, 2D elements and 3D Layer (z, sigma or sigma hybrid)
- TUFLOW FV's 2D or 3D explicit solver.
- An open model design, suitable for bespoke add-ons.
- TUFLOW FV is parallelised, allowing a single simulation to utilise more than one thread (i.e. more than one CPU or core).
- User controlled 1st or 2nd Order solution scheme.
- Wide ranging 2D boundary conditions for coastal, flooding and estuarine water quantity and quality applications.
- Structures including culverts, bridges, weirs, gates, pumps and more.
- Numerous output options, styles and formats.
- Supporting Matlab and Python functions for advanced 2D and 3D result visualisation.

TUFLOW Pricing (USD)			
TUFLOW Engine Price			
Item	Description	Annual Subscription ^{1 3}	Perpetual License ^{2 3}
Local Licenses Allows the Licensee to run one simulation per license on the computer with the Lock. For example, a Local 8 allows for up to 8 simulations to be run at one time on a single computer.	Local 1	\$2,210 (\$2,210 / license)	\$4,800 (\$4,800 / license)
	Local 2	\$3,180 (\$1,590 / license)	\$7,050 (\$3,525 / license)
	Local 4	\$4,140 (\$1,035 / license)	\$9,800 (\$2,450 / license)
	Other	Price upon request	
	<u>Additional Local License Locks:</u> The price for each additional Perpetual Local License 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. Discount Rate: - 10% for the 2 nd Local Lock - 20% for the 3 rd and subsequent Local Locks		
Network Licenses Allows multiple users and simulations across the licensee's local area network (LAN). For example, a Network 8 allows for up to 8 simulations to be run at one time on computers connected to the licensee's local area network (LAN).	Network 1	\$3,220 (\$3,220 / license)	\$7,000 (\$7,000 / license)
	Network 3	\$7,960 (\$2,654 / license)	\$17,300 (\$5,767 / license)
	Network 5	\$10,900 (\$2,180 / license)	\$24,800 (\$4,960 / license)
	Network 8	\$15,300 (\$1,913 / license)	\$34,500 (\$4,313 / license)
	Network 10	\$17,900 (\$1,790 / license)	\$40,100 (\$4,010 / license)
	Network 15	\$22,500 (\$1,500 / license)	\$51,100 (\$3,407 / license)
	Network 20	\$27,200 (\$1,360 / license)	\$61,200 (\$3,060 / license)
	Network 30	\$36,700 (\$1,223 / license)	\$82,700 (\$2,757 / license)
	Network 50	\$55,700 (\$1,114 / license)	\$125,700 (\$2,514 / license)
	Other	Price upon request	
	<u>Additional Locks:</u> Organisations who purchase a Network 20 or greater are entitled to a second Lock to distribute their Network licenses. This provides contingency for host computer outages. Note that a request to reduce the number of licenses on a lock may require the lock to be returned for re-coding as part of a redistribution.		
¹ Annual subscription licenses are more restrictive than perpetual licenses. New engine and module licenses can only be added annually at the time of the license renewal. Monthly rental license upgrades are not permitted during the period of rental. Annual subscription licenses are not subject to the multi-Local License discounts.			
² Perpetual licenses are the most flexible license type. Upgrades can be made to add new engine and module licenses at any time. Monthly rentals can also be added to periodically up/downscale.			
³ Perpetual Purchase from Annual Subscription: If at the end of a subscription period an Annual Subscription is purchased as a Perpetual License, 50% (ex taxes) of the last one-year's subscription fees are deducted from the perpetual license price. This offer is only valid at the time of the annual subscription renewal.			

Optional TUFLOW Modules

Computational Modules

TUFLOW FV AD Module	Provides access to the TUFLOW FV AD Module . Can be used to performs simulate plumes, flushing studies, saline intrusion, etc. Includes a heat exchange formulation for thermal studies.	50% of the equivalent TUFLOW Engine License Price.
TUFLOW FV GPU Module	Provides access to a GPU device for TUFLOW FV's heavily parallelised GPU Solver, thereby substantially reducing simulation times.	50% of the equivalent TUFLOW Engine License Price.
TUFLOW FV 3D Module	Provides access to the TUFLOW FV 3D Module . Can be used to represent flow conditions where the velocity and/or density profile varies with depth.	50% of the equivalent TUFLOW Engine License Price.
TUFLOW FV ST / MORPH Module	Provides access to the TUFLOW FV ST Module . Can be used to carry out cohesive and non-cohesive sediment transport simulations, including morphological update.	50% of the equivalent TUFLOW Engine License Price.
TUFLOW FV PT Module	Provides access to the TUFLOW FV PT Module. Can be used to carry out particle tracking simulations.	50% of the equivalent TUFLOW Engine License Price.
TUFLOW FV WQ Module	Provides access to the TUFLOW FV WQ Module . Can be used to carry out water quality simulations that include dissolved oxygen, silicate, inorganic nutrients, particulate and dissolved organic matter and multiple phytoplankton groups.	50% of the equivalent TUFLOW Engine License Price.

The number of Module licenses on a lock can be the same or less than the number of TUFLOW licenses. Additional Local Module Licenses are discounted at the same rates as for Additional Local License 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 License + Local 1 AD Module: \$9,800 + (0.5 x \$4,800) = \$12,200

Monthly Rental Licenses and Conditions

Monthly Rental of Local and Network Licenses is available to existing TUFLOW Licensees.

Rental Price = R + NL

R = Number of months times 10% of the Perpetual License Price.

NL = New Lock Purchase (if required) of \$200. 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.

Note:

- Rental of additional Local or Network Licenses are priced based on the price difference between the Licensee's Perpetual License and the value of the Perpetual + Rental Licenses.
- Local License Rentals are not subject to the multi-Local License discounts.
- Rental of additional Local or Network Licenses are only compatible with existing Perpetual Licenses. They are NOT compatible with existing Annual Subscription Licenses.
- Perpetual and Rental Locks can be attached to the same computer to access licenses from both Locks.

Perpetual Purchase from Rental: If at the end of the rental period the Rental License is purchased as a Perpetual License, 50% (ex taxes) of the consecutively accrued rental fees (maximum of 6 months) of R in the Rental Price formula are deducted from the purchase price. Offer valid for 1 month following last rental expiry.

TUFLOW FV Threads

TUFLOW FV is parallelised allowing a single simulation to utilise more than one thread (i.e. more than one CPU or core). The maximum total threads activated by TUFLOW FV simulations is limited to four times the maximum number of TUFLOW FV licenses available across all accessible dongles, unless additional threads have been purchased. For example, for a Local 4 license 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.

Cloud Simulation Options

Client Cloud Permissions	TUFLOW Cloud Simulation Service
<p>Organisations with access to Cloud hardware may host Network Licenses within their Cloud domain provided these licenses are only available to users who have access to the Licensee's LAN.</p> <p>The link below provides a detailed report discussing some benefits, challenges and solutions relating to Cloud computing to help people who are setting up their own system.</p> <p>Note, rental licenses can be used to up/downscale your license volume on a monthly basis.</p> <p>Click for further details</p>	<p>BMT offer a Cloud Simulation Service for TUFLOW. For cloud-based simulations, BMT will supply the TUFLOW licenses, provide access to Cloud hardware and run the simulations. This Cloud Simulation Service is quoted at a per hour rate, which varies depending on the license type, hardware selected (CPU and GPU) and order size.</p> <p>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.</p> <p>Click for further details</p>

Annual Software Upgrades and Support Fee

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 Licenses and is compulsory for Annual Subscription Licenses.</p> <p>For unmaintained Perpetual Licenses 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 license 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></p> <table><tr><td>Jul to Sep</td><td>0.75</td></tr><tr><td>Oct to Dec</td><td>0.50</td></tr><tr><td>Jan to Mar</td><td>0.25</td></tr><tr><td>Apr to Jun</td><td>1.00 (to June next year)</td></tr></table> <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>	Jul to Sep	0.75	Oct to Dec	0.50	Jan to Mar	0.25	Apr to Jun	1.00 (to June next year)
Jul to Sep	0.75									
Oct to Dec	0.50									
Jan to Mar	0.25									
Apr to Jun	1.00 (to June next year)									

Miscellaneous		
Academic License Discount	Licenses and the annual software upgrades and support fee are discounted for academic institutions for non-commercial, educational use.	50% discount on Perpetual and Annual Subscription Licenses
Upgrade of an Existing License	<p>Additional engine licenses can be added at a later date after the initial purchase. Modules can also be purchased at a later date after initial purchase of engine licenses.</p> <p>Local Licenses can be converted to Network Licenses and vice versa.</p> <p>Upgrades can be made to a fully maintained perpetual license at any time. Upgrades to annual subscription licenses only be completed annually at the time of their renewal.</p> <p>Changes to Locks can be carried out remotely.</p>	<p>The difference in current list price between the two licenses.</p> <p>The upgraded license(s) value must be of similar or greater value than the existing license(s). No refunds are issued.</p>
New Lock Purchase	New lock purchase	\$200
Transfer or Replacement of an Existing Lock	If a Lock becomes faulty through normal use, there is no replacement charge - please contact sales@tuflow.com .	No Cost
	Damaged Hardware Locks that are returned and need to be replaced.	\$200
	Software Locks that need to be transferred to another computer.	\$100
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 license is equal to the License Fee of the TUFLOW Software payable at the time of the replacement of the lost License Lock.</p>	

This Price List is to be read in conjunction with the latest TUFLOW PRODUCTS SOFTWARE LICENSE AGREEMENT available from <https://www.tuflow.com/downloads/>.

The applicable currency is the currency of the country of the Licensee's invoicing address. TUFLOW Prices are available in AUD, NZD, EUR, GBP, USD, INR and PKR from <https://www.tuflow.com/pricing/>. 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.