



# products

paramics, powerful components working together

Quadstone Paramics is a modular suite of microscopic simulation tools providing a powerful, integrated platform for modelling a complete range of real world traffic and transportation problems. The modules combine together to improve usability, integration and productivity allowing users and clients to get added value from the modelling process. The Software is fully scaleable and designed to handle scenarios as wide-ranging as a single intersection through to a congested freeway, or the modelling of an entire city's traffic system.

The following modules make up the full Paramics suite :-

## Core Tools

### Modeller

Modeller provides the three fundamental operations of model build, traffic simulation (with 3-D visualisation) and statistical output accessible through a powerful and intuitive graphical user interface.

### Processor

Processor is a batch simulation productivity tool used for easy sensitivity and option testing. Processor can be used to automate simulation and analysis processes, reducing user down time and speeding up the model development lifecycle.

### Analyser

Analyser is the powerful post data analysis tool used for custom analysis and reporting of model statistics. Analyser is used to interrogate a single set of data or it can be used to compare or average multiple datasets from multiple sources e.g. base layout, alternatives, and observed field data helping to speed up the model calibration and validation.

### Designer

Designer is a 3D model building and editing tool provided for use with Paramics Modeller. It can be used to prepare complex and life-like 3D models to aid visualization for presentation and movie capture. Designer is free to any licensed user of the Paramics applications and is provided with over 900 ready-to-use 3D models.

## Optional Modules

### Estimator

Estimator is a revolutionary OD Matrix estimation tool. Estimator utilizes all aspects of the core Paramics simulation, ensuring maximum compatibility between the OD matrix, model structure, and underlying assignment techniques.

### Converter

Converter takes existing network data from a range of sources and converts it into a basic Quadstone Paramics network. Converter can work with data from various sources including, emme, Mapinfo, ESRI, Synchro, Corsim, Cube /TP+ / Viper, flat ascii, and CSV.

### Programmer

Programmer is a comprehensive development API for the Paramics suite. It is the most powerful research and customization tool available for users interested in microscopic traffic simulation. Programmer allows users to augment the core Paramics simulation with new functions, driver behaviour and practical features. At the same time researchers can opt to override or replace sections of the core Paramics simulation with their own behavioural models.

### Paramics Pedestrian Module (PPM)

The Paramics Pedestrian Module (PPM) provides a realistic representation of the "friction" to traffic flow caused by pedestrians. Our simple to use pedestrian modelling system allows users to obtain meaningful results quickly, ensuring a realistic model is developed within the minimum amount of time and resource. In Quadstone Paramics, our pedestrians are free space agents; simulated people who can move freely within the study area defined by the user.