Ikaros and Isis Product Family Overview

Ikaros and Isis Systems comprise PC hardware (WindowsTM compatible PC and peripherals), and Ikaros and Isis First Systems also include a color laser printer and archiving drive. All Ikaros and Isis systems with image acquisition functionality (Ikaros/Isis First, Satellite, and Capture Systems) come with the MetaSystems CoolCube 1m monochrome CCD camera. The systems do not include microscopes, fluorescence filters, and camera adaptors.

Depending on the configuration, Ikaros and Isis software generally comprises the following feature (the list is not exhaustive):

- Optimized screen design for extremely fast work
- Easy to learn and to adapt to existing workflow
- Password protected user login
- High flexibility due to adaptable parameter sets ('Experiment Types')
- Unlimited undo and full documentation of each processing step
- Mouse wheel zoom - adjustable zoom in all functions
- Flexible and fully customizable case data sheet
- Customizable interface for external data exchange
- Possibility to search for any field in the data sheets

Additionally MetaClient, software to read, display, filter, and search case and image data, is installed on each Ikaros and Isis system. MetaClient includes a convenient case image gallery, a case statistics module, and many filtering options for case data. Ikaros and Isis can be directly launched from MetaClient with the selected case or image.

The tables below list all available products in the Ikaros (karyotyping) and Isis (fluorescence imaging) product family. Please refer to the legend at the end of the tables for detail.

The listing of functions is restricted to the main features and is therefore not exhaustive. Please contact MetaSystems for further details.

Ikaros Product Family

		First (full) System	Satellite System	Capture System	Analysis System
Hardware	PC	●	●	●	●
	Camera	●	●	●	×
	Printer	●	×	×	×
	RDX Archiving Hardware	●	×	×	×
Functionality	b/w Image Acquisition	●	●	●	×
	b/w Karyotyping	●	●	×	●
	Image Enhancement	●	●	●	●
	Image Annotation	●	●	●	●
	Patient Datasheet	●	●	●	●
	MetaArchive Archiving Software	●	×	×	×
	MetaClient Data Management Software	●	●	●	●
	Full Documentation of Processing Steps	●	●	×	●
	Displaying of Original / Processed Image	●	●	●	●
	Karyogram Comparison / Combined Karyogram	●	●	×	●
	Export Function	●	●	×	●
	Case Selection via Case List / Image Gallery	●	●	●	●
	Renaming and Deleting of Cases	●	●	●	●
	Printing	●	●	×	●

●	Included
○	Optionally available
×	Not included
◘	Partly included

Isis Product Family

		First (full) System	Satellite System	Capture System	Analysis System
Hardware	PC	●	●	●	●
	Camera	●	●	●	×
	Printer	●	×	×	×
	RDX Archiving Hardware	●	×	×	×
Functionality	Color Image Acquisition	●	●	●	×
	Image Enhancement	●	●	⭘	●
	Image Annotation	●	●	●	●
	Patient Datasheet	●	●	●	●
	MetaArchive Archiving Software	●	×	×	×
	MetaClient Data Management Software	●	●	●	●
	Color Karyotyping	○[1]	○[1]	×	○[1]
	CGH	○[1]	○[1]	×	○[1]
	mFISH/mBAND	○[1]	○[1]	×	○[1]
	Telomere Analysis	○[1]	○[1]	×	○[1]
	Full Documentation of Processing Steps	●	●	×	●
	Displaying of Original / Processed Image	●	●	●	●
	Karyogram Comparison / Combined Karyogram	![1]	![1]	×	![1]
	Export Function	●	●	×	●
	Case Selection via Case List / Image Gallery	●	●	●	●
	Renaming and Deleting of Cases	●	●	●	●
	Printing	●	●	×	●

●	Included
○/○[1]	Optionally available / Requires color karyotyping module
×	Not included
⭘	Partly included
![1]	Requires color karyotyping module

Upgrades and Software Modules

		Isis Upgrade for Ikaros	Ikaros Upgrade for Isis	Color Karyotyping Module	CGH Module	mFISH/ mBAND Module	Telomere Analysis
Functionality	b/w Image Acquisition	×	●	×	×	×	×
	b/w Karyotyping	×	●	×	×	×	×
	Color Image Acquisition	●	×	×	×	×	×
	Image Enhancement	●	●	●	●	●	●
	Image Annotation	●	●	●	●	●	●
	Patient Datasheet	●	●	●	●	●	●
	Color Karyotyping	○[1]	×	●	●[1]	●[1]	●[1]
	CGH	○[1]	×	×	●[1]	×	×
	mFISH/mBAND	○[1]	×	×	×	●[1]	×
	Telomere Analysis	○[1]	×	×	×	×	●[1]
Hardware	No hardware is delivered with the upgrades and software modules.						

●/●[1]	Included / Requires color karyotyping module
○/○[1]	Optionally available / Requires color karyotyping module
×	Not included
⭘	Partly included
![1]	Requires color karyotyping module

Review, Viewer and Database Software Licences

		Ikaros / Isis Review Software	Ikaros / Isis Viewer Software	Ikaros / Isis Database Software
Functionality	Image Acquisition	×	×	×
	Karyotyping	×	×	×
	Image Enhancement	⊙	×	×
	Image Annotation	●	×	×
	Patient Datasheet	⊙	×	●
	MetaClient Data Management Software	●	●	●
	Full Documentation of Processing Steps	●	×	×
	Displaying of Original / Processed Image	●	×	×
	Karyogram Comparison / Combined Karyogram	●	×	×
	Export Function	●	×	×
	Case Selection via Case List / Image Gallery	●	●	●
	Renaming and Deleting of Cases	●	×	●
	Printing	●	×	×
Hardware		Requires a PC following MetaSystems specification.		

●	Included
○	Optionally available
×	Not included
⊙	Partly included

Requirements

	Products	Hardware and Software Requirements
Ikaros	First (full) System	• TL microscope w/ camera adapter
	Second (satellite) System	• one Ikaros has to be present in the lab • TL microscope w/ camera adapter
	Capture System	• one Ikaros has to be present in the lab • TL microscope w/ camera adapter
	Analysis System	• one Ikaros has to be present in the lab
	Ikaros Upgrade for Isis	• one Isis has to be present in the lab
Isis	First (full) System	• FL microscope w/ camera adapter and FL filters
	Second (satellite) System	• one Isis has to be present in the lab • FL microscope w/ camera adapter and FL filters
	Capture System	• one Isis has to be present in the lab • FL microscope w/ camera adapter and FL filters
	Analysis System	• one Isis has to be present in the lab
	Isis Upgrade for Ikaros	• one Ikaros has to be present in the lab
	Color Karyotyping Module	• one Isis has to be present in the lab
	mFISH / mBAND Module	• Isis w/ color karyotyping module
	CGH Module	• Isis w/ color karyotyping module
	Telomere Analysis	• Isis w/ color karyotyping module
Review, Viewer and Database Software Licenses		• requires a PC following MetaSystems specifications