

# AID Reader Systems

## Product and Service Overview 2015

Compliance	Page 3
Comparison of the different AID EliSpot/FluoroSpot Reader Systems	Page 6

### AID Reader Systems

AID Classic	(ELR08)	Page 7
AID <i>i</i> Spot	(ELR08IFL)	Page 9
AID <i>i</i> Spot Spectrum	(ELR088IFL)	Page 11
AID <i>i</i> Spot Robot	(ELROB07IFL)	Page 13
AID <i>v</i> Spot Spectrum	(VSR078IFL)	Page 15
AID <i>multi</i> Spot	(MSR08)	Page 17

### AID Colony Counter

AID <i>bac</i> Spot	(BAC04)	Page 19
AID <i>bac</i> Spot Robot	(BACROB08)	Page 20

## **Service Overview**

Preventative Maintenance Contracts	Page 21
Service Contracts	Page 21

## **Special Features**

Page 22

## **AID EliSpot/FluoroSpot Assays**

Research Kits	Page 23
Diagnostic Kits	Page 24

## **Manufacturer**

AID Reader Systems & AID Colony Counter	Page 25
AID EliSpot/FluoroSpot Assay Kits	

## **AID Reader Systems comply with the requirements of the “international regulatory guidelines”**

Our philosophy does not allow compromises. AID GmbH not only fulfills the basic requirements under consideration of the harmonized standards.

We do more!

Based on patient safety our company wants not only the highest security but also permanently satisfied customers and first-class quality. The following document provides an overview of the commitments, standards and management systems that help us to adopt the principles implemented in our company.

### **CE - Declaration of conformity**

#### **IVDD 98/79/EG**

Since 1998 AID's QM (Quality Management) complies with the European Law on Medical Devices (Medizinproduktegesetz), particularly with the in vitro diagnostic directive (IVDD) 98/79/EC (Instruction, Technical Documentation depended on product). IVDD covers the placing on the market and putting into service of in vitro diagnostic medical devices. AID GmbH developed and manufactured products meet all of the relevant essential requirements contained within the IVDD. AID GmbH products carrying the CE sign can be sold without further validation anywhere in the European Union.

### **Medical devices - Quality management systems - Requirements for regulatory purposes**

#### **DIN EN ISO 13485:2012 + AC:2012**

ISO 13485 is a quality system standard designed specifically for medical device companies. The ISO 13485 standard supplements ISO 9001 and has many of the same requirements. However, there are additional requirements for process control, design control, retention of records, accountability, traceability and more. AID GmbH is certified according to DIN EN ISO 13485.

ISO 13485 and 21 CFR Part 820 are harmonized.

### **Quality management systems - Requirements**

#### **DIN EN ISO 9001:2015**

ISO 9001 is a standard for quality management systems. It is designed to help organizations ensure that they meet customers' needs. AID GmbH is certified according to DIN EN ISO 9001.

## **Risk Assessment**

### **DIN EN ISO 14971:2013-04**

Medical devices - Application of risk management to medical devices. AID GmbH is certified according to DIN EN ISO 14971 since 2003.

## **Medical device software - Software life cycle processes**

### **DIN EN 62304:2013-10**

Software is often an integral part of medical device technology. Establishing the safety and effectiveness of a medical device containing software requires knowledge of that the software is intended to do and demonstration that the use of the software fulfils those intentions without causing any unacceptable risks.

## **Application of usability engineering to medical devices**

### **IEC 63366-1:2015**

IEC 62366 is a process-based standard that aims to help manufacturers of medical devices to design for high usability replace ISO/IEC 60601-1-6: Medical electrical equipment - Part 1-6: General requirements for safety - Collateral standard: Usability).

### **FDA 21 CFR Part 11**

Part 11 of the Code of Federal Regulations defines the criteria under which electronic records and electronic signatures are considered to be trustworthy, reliable and equivalent to paper records. The software of all AID devices can be adjusted to meet these requirements.

## **Safety**

### **DIN EN 61010-2-101:2013-01**

Safety requirements for electrical equipment for measurement, control and laboratory use. Particular requirements for in vitro diagnostic (IVD) medical equipment to eliminate electrical hazards to operating staff.

### **DIN EN 62638:2010-08**

Safety requirements for portable electrical equipment, e.g. computer.

## **Electromagnetic Compatibility (EMC)**

### **DIN EN 61326-2-6:2013-09**

Electrical equipment for measurement, control and laboratory use - EMC requirements.

## Environmental Aspects

### RoHS Directive 2011/65/EU - Restriction of Hazardous Substances

This Directive restricts the use of potentially hazardous substances in electro-technical and electronic equipment (limits for the permissible levels), to ensure the required level of protection for people's health and environment.

### WEEE - Waste of Electrical and Electronic Equipment directive 2012/19/EU

The WEEE Directive set collection, recycling and recovery targets for all types of electrical goods.

## Instruction, Technical Documentation

AID Reader Systems technical documentation are generated during the product life cycle and refers to different documents with product related data and information such as product definition and specification, design, manufacturing, quality assurance, description of features, interfaces, service and repair of a technical product as well as its safe disposal.

For a detailed manual we refer to the User Guide inter alia.

## GMP/GLP

GMP is as a quality standard included in the German Law on Pharmaceutical Products (Arzneimittelgesetz). AID GmbH products (AID Reader Systems) are designed to work in a GMP/GLP environment according to GMP conditions. They can be adapted to individual customer wishes at any time to meet the requirements of the severe internal and external guidelines (GMP/GLP).

## Comparison of the AID EliSpot/FluoroSpot Reader Systems

	AID Reader Systems					
	Classic	iSpot	iSpot Spectrum	iSpot Robot	vSpot Spectrum	multiSpot
<b>Assay types</b>						
EliSpot Assay	yes	yes	yes	yes	yes	yes
1-, 2- and 3- color FluoroSpot Assays	no	yes	yes	yes	yes	yes
Neutralization Assay	96-well	96-well	96-well	96-well	6- to 96-well	96-well
Virus Plaque Assay	96-well	96-well	96-well	96-well	6- to 96-well	96-well
Cell Counting	no	no	no	no	no	yes
HEp-2-screening	no	no	no	no	no	yes
HLA-screening	no	no	no	no	no	yes
Colony Counting	no	no	no	no	yes	no
Other experiments	on inquiry	on inquiry	on inquiry	on inquiry	on inquiry	on inquiry
<b>Plate formats</b>						
96 and 384-well plates	yes	yes	yes	yes	yes	yes
6, 12, 24, 48, 96 and 384-well plates	no	no	no	no	yes	no
Glass slides	no	no	no	no	no	yes (4x)
Terasaki plates	no	no	no	no	no	yes
<b>Plates per run</b>	1	1	1	≤ 30	1	1
<b>Camera resolution, megapixel (MP)</b>	5 MP	2 MP	5 MP	2 MP	5 & 5 MP	2 & 5 MP
<b>Objectives</b>	-	-	-	-	-	4x, 10x, 20x
<b>Max. no. of fluorescent filters</b>	0	3	7	3	7	3
<b>Narrow-band filters on board</b>	0	2	3	2	3	3
<b>Time demand (EliSpot, 96-well plate)</b>	≈3 min	≈3 min	≈3 min	≈3 min	≈3 min	≈3 min
<b>Time demand (FluoroSpot, 96-well plate)</b>	-	≈10 min	≈10 min	≈10 min	≈10 min	≈10 min

## AID Classic (ELR08)

### The basic 96 and 384-well plate ELiSpot Reader

This is the classic AID ELiSpot Reader type. The device is fast, efficient, user-friendly and has become one of the most successful ELiSpot Reader Systems on the market. The **AID Classic** interprets any type of ELiSpot plate, including all brands of membrane type plates, ELISA-style plates and low volume plates. The reader simultaneously takes high resolution images, auto centers the well and counts according to the user's settings.



Data acquisition is fully automated. Counting results and all other parameters can be exported to Word, Excel, PowerPoint, PDF or csv.-files. A compact footprint of only 50 cm x 45 cm saves laboratory space.

### Key features of the AID Classic

- <3 minutes for complete interpretation of an enzymatic 96-well plate (incl. image capturing, counting, analyzing and data export)
- High resolution images with a 5 megapixel, fire wire connected digital camera
- LED ring illumination
- Controlled by a high-end PC; 24" 16:9 screen
- 90 mA @ 240 V/ 120 mA @ 110 V
- One mouse click from raw data to final result
- CE, DIN EN ISO 9001, DIN EN ISO 13485 certified
- Manuals, videos and interactive help files included



## AID Classic (ELR08) - Technical Specifications

<b>Hardware</b>	
PC system	High-end PC with Intel Core i5 processor, 4 GB RAM, 500 GB hard disk 24" 16:9 screen
Illumination	Evenly spread, long life LED ring illumination
Camera resolution and control	5 megapixel, color, firewire-connected
Power input	90 mA @ 240 V/ 120 mA @ 110 V
Footprint	500x450x300 mm (Peripherals not included)
<b>Software</b>	
Operating system	Windows 7 Professional (64 bit)
AID Software	spotAID V8.x - E
MS Office Version	MS Office 2010 Professional
<b>Plate formats and assays</b>	
Applicable assays	EliSpot, Viral Plaque Assays, Neutralization Assays
Plate formats	96 and 384-well plates
<b>Certifications/ Validations</b>	
DIN EN ISO 13485:2012 + AC:2012	Yes
DIN EN ISO 9001:2008-12	Yes
DIN EN ISO 14971:2013-04	Yes
DIN EN 62304 (VDE 0750-101):2013-10	Yes
EN 61010-2-101:2002	Yes
DIN EN 62638:2010 -08 (VDE 701/702)	Yes
DIN EN 61326-2-6 (VDE 0843-20-2-6): 2006-10	Yes
CE	Yes
FDA 21 CFR Part 11	After consultation
<b>Miscellaneous</b>	
Analysis of multi-cytokine secretion assay	By color
Software licenses	2 additional software licenses included
Time demand for complete analysis	≈2 min for a 96-well enzymatic plate
Warranty	2 years warranty, Service and Preventative Maintenance Contracts available
Delivery schedule	4-6 weeks after ordering



## AID *iSpot* (ELR08IFL)

### The basic 96 and 384-well plate EliSpot/FluoroSpot Reader

The **AID *iSpot*** is one of the most successful EliSpot/FluoroSpot Reader developments in recent years. The **AID *iSpot*** for the first time allows analyzing both: Enzymatic and fluorescent (FluoroSpot) based EliSpot assays. The **AID *iSpot*** comprises the same outstanding functionality, such as layout-generator, rule-compiler, various export possibilities etc., as the AID Classic.



Beside all of the popular functions of the AID Classic, the **AID *iSpot*** simultaneously allows for 1-, 2- or even 3-color FluoroSpot analysis. A simple “one-click switch” between enzymatic and fluorescent mode, without the need of hardware changes, is enough to switch from one mode to the other.

### Key features of the AID *iSpot*

- Enzymatic and fluorescent analysis
- <3 minutes for an enzymatic EliSpot plate, ≈10 minutes for a 2-color FluoroSpot plate
- Digital Firewire Camera, 2 megapixel, color, optimized for fluorescence imaging
- LED ring illumination, XBO light source, 3&1 filter wheel
- 2 narrow-band hard coated fluorescent filters (FITC and Cy3) on board, third filter on request
- Optimized for 1-, 2- and 3-color fluorescent analysis
- Controlled by a high-end PC; 24” 16:9 screen
- 110 mA @ 240 V/ 140 mA @ 110 V
- CE, DIN EN ISO 9001, DIN EN ISO 13485 certified
- Manuals, videos and interactive help files included

## AID iSpot (ELR08IFL) - Technical Specifications

<b>Hardware</b>	
PC system	High-end PC with Intel Core i5 processor, 4 GB RAM, 500 GB hard disk 24" 16:9 screen
Fluorescent filter set and control	2 narrow-band filters on board, 4 positions filter/ LED changer
Fluorescent imaging	"FluoroAID", AID's image overlay technology
Illumination	Evenly spread, long life LED ring and external Xenon light source
Camera resolution and control	2 megapixel, optimized for fluorescence imaging, firewire-connected
Power input	110 mA @ 240 V/ 140 mA @ 110 V
Footprint	500x450x300 mm (Peripherals not included)
<b>Software</b>	
Operating system	Windows 7 Professional (64 bit)
AID Software	spotAID V8.x - E
MS Office Version	MS Office 2010 Professional
<b>Plate formats and assays</b>	
Applicable assays	EliSpot, FluoroSpot, Viral Plaque Assays, Neutralization Assays Others after consultation
Plate formats	96 and 384-well plates
<b>Certifications/ Validations</b>	
DIN EN ISO 13485:2012 + AC:2012	Yes
DIN EN ISO 9001:2008-12	Yes
DIN EN ISO 14971:2013-04	Yes
DIN EN 62304 (VDE 0750-101):2013-10	Yes
EN 61010-2-101:2002	Yes
DIN EN 62638:2010 -08 (VDE 701/702)	Yes
DIN EN 61326-2-6 (VDE 0843-20-2-6): 2006-10	Yes
CE	Yes
FDA 21 CFR Part 11	After consultation
<b>Miscellaneous</b>	
Software licenses	2 additional software licenses included
Time demand for complete analysis	≈3 min for a 96-well enzymatic plate, ≈10 min for a FluoroSpot plate
Maximum number of fluorescent filters	3
Warranty	2 years warranty, Service and Preventative Maintenance Contracts available
Delivery schedule	4-6 weeks after ordering
Installation & on-site training	Included in quoted price

## AID *i*Spot Spectrum (ELR088IFL)

The ultimate high resolution 96 and 384-well plate EliSpot/FluoroSpot Reader

The **AID *i*Spot Spectrum** is the newest generation of the successful AID *i*Spot, the first commercially available combined EliSpot/FluoroSpot Reader. The **AID *i*Spot Spectrum** is equipped with a 7&1 filter wheel, which allows for a customized selection of up to 7 individual narrow-band hard coated fluorescent filters, whilst still allowing for our “one-click switch” to analyze enzymatic EliSpot assays via LED illumination.



The insertion of a high resolution 5 megapixel digital camera provides well images of unprecedented quality. Like in AID's *i*Spot Reader System the patented FluoroAID image overlay technology permits exact detection of cells secreting multiple cytokines.

### Key features of the AID *i*Spot Spectrum

- Enzymatic and fluorescent analysis
- Digital Firewire Camera, 5 megapixel, color, optimized for fluorescence imaging
- LED ring illumination, XBO light source, 7&1 filter wheel
- 3 narrow-band hard coated fluorescent filters (FITC and Cy3) and a third one of user's choice on board. Up to 7 separate fluorescent filters possible
- Optimized for 1-, 2- and 3-color fluorescent analysis
- Automated plate input/output module
- Controlled by a high-end PC; 24" 16:9 screen
- 160 mA @ 240 V/ 230 mA @ 110 V
- CE, DIN EN ISO 9001, DIN EN ISO 13485 certified
- Manuals, videos and interactive help files included

## AID iSpot Spectrum (ELR088IFL) - Technical Specifications

<b>Hardware</b>	
PC system	High-end PC with Intel Core i7 processor, 8 GB RAM, ≥ 1 TB hard disk 24" 16:9 screen
Fluorescent filter set and control	3 narrow-band filters on board, 8 positions filter/ LED changer
Fluorescent imaging	"FluoroAID", AID's image overlay technology
Illumination	Evenly spread, long life LED ring and external Xenon light source
Camera resolution and control	5 megapixel, optimized for fluorescence imaging, firewire-connected
Power input	160 mA @ 240 V/ 230 mA @ 110 V
Footprint	500x450x300 mm (Peripherals not included)
<b>Software</b>	
Operating system	Windows 7 Professional (64 bit)
AID Software	spotAID V8.x - E
MS Office Version	MS Office 2010 Professional
<b>Plate formats and assays</b>	
Applicable assays	EliSpot, FluoroSpot, Viral Plaque Assays, Neutralization Assays Others after consultation
Plate formats	96 and 384-well plates
<b>Certifications/ Validations</b>	
DIN EN ISO 13485:2012 + AC:2012	Yes
DIN EN ISO 9001:2008-12	Yes
DIN EN ISO 14971:2013-04	Yes
DIN EN 62304 (VDE 0750-101):2013-10	Yes
EN 61010-2-101:2002	Yes
DIN EN 62638:2010 -08 (VDE 701/702)	Yes
DIN EN 61326-2-6 (VDE 0843-20-2-6): 2006-10	Yes
CE	Yes
FDA 21 CFR Part 11	After consultation
<b>Miscellaneous</b>	
Software licenses	2 additional software licenses included
Time demand for complete analysis	≈3 min for a 96-well enzymatic plate, ≈10 min for a FluoroSpot plate
Maximum number of fluorescent filters	7
Warranty	2 years warranty, Service and Preventative Maintenance Contracts available
Delivery schedule	4-6 weeks after ordering
Installation & on-site training	Included in quoted price

## AID iSpot Robot (ELROB07IFL)

### High throughput 96 and 384-well plate EliSpot/FluoroSpot analysis

Designed for high throughput and traceable results, this is the ultimate tool for large groups of samples. The **AID iSpot Robot** can take up to 30 plates in one automated, walk-away process and will analyze them in less than 90 minutes. The system is designed to interpret enzymatic EliSpot assays as well as 1-, 2- and 3-color fluorescence EliSpot assays. The **AID iSpot Robot** simultaneously takes high resolution images, auto centers the well and counts according to user's settings.



Data acquisition is fully automated. In addition the count results can automatically be analyzed with the integrated rule compiler.

Customized robotic AID Reader Systems able to handle other plate formats or upscale for more plates per run on request. Please contact AID for details.

### Key features of the AID iSpot Robot

- Hands-off, walk-away system
- Automatic barcode recognition
- Integrated system, not a reader/stacker solution
- Up to 30 96-well plates in one run
- Digital Firewire Camera, 2 megapixel, color, optimized for fluorescence imaging
- LED ring illumination, XBO light source, 3&1 filter wheel
- 2 narrow-band hard coated fluorescent filters (FITC and Cy3) on board, third filter on request
- Optimized for 1-, 2- and 3-color fluorescent analysis
- Controlled by a high-end PC; 24" 16:9 screen
- 120 mA @ 240 V/ 160 mA @ 110 V
- CE, DIN EN ISO 9001, DIN EN ISO 13485 certificated
- Manuals, videos and interactive help files included



## AID iSpot Robot (ELROB07IFL) - Technical Specifications

<b>Hardware</b>	
PC system	High-end PC with Intel Core i7 processor, 8 GB RAM, ≥ 1TB hard disk 2 TB external hard disk, UPS 24" 16:9 screen
Fluorescent filter set and control	2 narrow-band filters on board, 4 positions filter/ LED changer
Fluorescent imaging	"FluoroAID", AID's image overlay technology
Illumination	Evenly spread, long life LED ring and external Xenon light source
Camera resolution and control	2 megapixel, optimized for fluorescent imaging, firewire-connected
Power input	120 mA @ 240 V/ 160 mA @ 110 V
Footprint	760x540x460 mm (Peripherals not included)
<b>Software</b>	
Operating system	Windows 7 Professional (64 bit)
AID Software	AID EliSpot V7.x
MS Office Version	MS Office 2010 Professional
Additional software solutions	AID EliStat, AIDiagnostics
<b>Plate formats and assays</b>	
Applicable assays	EliSpot, FluoroSpot, Viral Plaque Assays, Neutralization Assays Others after consultation
Plate formats	96 and 384-well plates, up to 30 plates per run
<b>Certifications/ Validations</b>	
DIN EN ISO 13485:2012 + AC:2012	Yes
DIN EN ISO 9001:2008-12	Yes
DIN EN ISO 14971:2013-04	Yes
DIN EN 62304 (VDE 0750-101):2013-10	Yes
EN 61010-2-101:2002	Yes
DIN EN 62638:2010 -08 (VDE 701/702)	Yes
DIN EN 61326-2-6 (VDE 0843-20-2-6): 2006-10	Yes
CE	Yes
FDA 21 CFR Part 11	After consultation
<b>Miscellaneous</b>	
Software licenses	2 additional software licenses included
Time demand for complete analysis	≈3 min for a 96-well enzymatic plate, ≈10 min for a FluoroSpot plate
Maximum number of fluorescent filters	3
Warranty	2 years warranty, Service and Preventative Maintenance Contracts available
Delivery schedule	4-6 weeks after ordering
Installation & on-site training	Included in quoted price

## AID vSpot Spectrum (VSR078IFL)

### High resolution EliSpot/FluoroSpot Reader for various plate formats

The **AID vSpot Spectrum** is the new high-end EliSpot/FluoroSpot device from AID. It combines AID iSpot 96-well FluoroSpot analyzing with enzymatic multiple plate evaluation. On the enzymatic side the **AID vSpot Spectrum** can handle a variety of different assay types including Viral Plaque Assays and Neutralization Assays. Colony Counting is possible when performed in a 6-well plate format. Other formats on inquiry. Due to a genuine optical zoom, versatile stage settings and unique software features this reader is not restricted to the analysis of 96-well plate formats. It will also read 6, 12, 24, 48 and 384-well plates. The insertion of high resolution digital cameras provides well images of unprecedented quality.



The **AID vSpot Spectrum** is equipped with an 8 position filter wheel, which allows for a customized selection of up to 7 individual narrow-band fluorescent filters, whilst still allowing for our “one-click switch” to perform enzymatic analysis via LED illumination on different plate formats.

### Key features of the AID vSpot Spectrum

- EliSpot, FluoroSpot, Virus Plaque Assays, Colony Counting
- <3 minutes for an enzymatic EliSpot plate, ≈10 minutes for a 2-color FluoroSpot plate
- Handles 6, 12, 24, 48, 96 and 384-well plates
- 2 Digital Firewire Cameras, 5 megapixel each, color, optimized for fluorescence imaging
- LED ring illumination, XBO light source, 7&1 filter wheel
- 3 narrow-band hard coated fluorescent filters (FITC and Cy3) and a third one of user's choice on board. Up to 7 separate filters
- Optimized for 1-, 2- and 3-color fluorescent analysis
- Controlled by a high-end PC; 24" 16:9 screen
- 170 mA @ 240 V/ 260 mA @ 110 V
- CE, DIN EN ISO 9001, DIN EN ISO 13485 certified
- Manuals, videos and interactive help files included



## AID vSpot Spectrum (VSR078IFL) - Technical Specifications

<b>Hardware</b>	
PC system	High-end PC with Intel Core i7 processor, 8 GB RAM, ≥ 1 TB hard disk 24" 16:9 screen
Fluorescent filter set and control	3 narrow-band filters on board, 8 positions filter/ LED changer
Fluorescent imaging	"FluoroAID", AID's image overlay technology
Illumination	Evenly spread, long life LED ring and external Xenon light source
Camera resolution and control	5 megapixel, optimized for fluorescence imaging, firewire-connected 5 megapixel (6, 12, 24, 48, 96 and 384-well applications), firewire-connected
Power input	170 mA @ 240 V/ 260 mA @ 110 V
Footprint	430x430x550 mm (Peripherals not included)
<b>Software</b>	
Operating system	Windows 7 Professional (64 bit)
AID Software	AID EliSpot V7.x
MS Office Version	MS Office 2010 Professional
Additional software solutions	AID EliStat, AIDiagnostics
<b>Plate formats and assays</b>	
Applicable assays	EliSpot, FluoroSpot, Viral Plaque Assays, Neutralization Assays Others after consultation
Plate formats	6, 12, 24, 48, 96 and 384-well plates
<b>Certifications/ Validations</b>	
DIN EN ISO 13485:2012 + AC:2012	Yes
DIN EN ISO 9001:2008-12	Yes
DIN EN ISO 14971:2013-04	Yes
DIN EN 62304 (VDE 0750-101):2013-10	Yes
EN 61010-2-101:2002	Yes
DIN EN 62638:2010 -08 (VDE 701/702)	Yes
DIN EN 61326-2-6 (VDE 0843-20-2-6): 2006-10	Yes
CE	Yes
FDA 21 CFR Part 11	After consultation
<b>Miscellaneous</b>	
Software licenses	2 additional software licenses included
Time demand for complete analysis	≈3 min for a 96-well enzymatic plate, ≈10 min for a FluoroSpot plate
Maximum number of fluorescent filters	7
Warranty	2 years warranty, Service and Preventative Maintenance Contracts available
Delivery schedule	4-6 weeks after ordering
Installation & on-site training	Included in quoted price

## **AID *multiSpot* (MSR08)**

The multifunctional imaging device from AID

The **AID *multiSpot*** fulfills probably all needs in a modern immunology lab. Equipped with a combined EliSpot/FluoroSpot module for counting and interpreting enzymatic as well as fluorescent EliSpot assays this device also comes with an automated microscope. This unit is provided with 4x, 10x and 20x software controlled objectives, allowing for a simple switch between different magnifications.



The stage handles 96 and 384-well plates, up to 4 conventional slides or classical Terasaki plates. The software is adapted to FluoroSpot/EliSpot assays, HEp-2 screening, Cell Counting, HLA-screening and many more applications.

### **Key features of the AID *multiSpot***

- EliSpot, FluoroSpot, Cell Viability Tests, HLA-screening, HEp-2 screening, other applications on request
- Digital Firewire Camera, 5 and 2 megapixel, color, optimized for fluorescence imaging
- LED ring illumination, two XBO light sources, 3&1 filter wheel, 4x, 10x and 20x objectives on a software controlled objective changer (other objectives on request)
- 3 narrow-band hard coated fluorescent filters (FITC and Cy3) on board, a third one of users choice
- Optimized for 1-, 2- and 3-color fluorescent analysis
- Controlled by a high-end PC; 24" 16:9 screen
- 140 mA @ 240 V/ 170 mA @ 110 V
- CE, DIN EN ISO 9001, DIN EN ISO 13485 certified
- Manuals, videos and interactive help files included

## AID *multi*Spot (MSR08) - Technical Specifications

<b>Hardware</b>	
PC system	High-end PC with Intel Core i7 processor, 8 GB RAM, ≥ 1 TB hard disk 24" 16:9 screen
Fluorescent filter set and control	3 narrow-band filters on board, 4 positions filter/LED changer (FluoroSpot application); Quadset DAPI/FITC/Cy3/Cy5 (Microscopic application)
Fluorescent imaging	"FluoroAID", AID's image overlay technology
Illumination	Evenly spread, long life LED ring and 2 external Xenon light sources
Camera resolution and control	2 megapixel, optimized for fluorescence imaging, firewire-connected (EliSpot/FluoroSpot application) 5 megapixel (Microscopic application), 4x, 10x and 20x objectives (others on request), software controlled objective changer
Power input	140 mA @ 240 V/ 170 mA @ 110 V
Footprint	430x430x360 mm (Peripherals not included)
<b>Software</b>	
Operating system	Windows 7 Professional (64 bit)
AID Software	AID EliSpot V7.x, AID cytoSpot V2.x
MS Office Version	MS Office 2010 Professional
Additional software solutions	AID EliStat, AIDiagnostics
<b>Plate formats and assays</b>	
Applicable assays	EliSpot, FluoroSpot, Viral Plaque Assays, Neutralization Assays, Cell Counting Cell Viability Tests, Apoptosis Assays, HLA-screening, PAP smear. Others after consultation
Plate formats	96 and 384-well plates, Terasaki plates, glass slides
<b>Certifications/ Validations</b>	
DIN EN ISO 13485:2012 + AC:2012	Yes
DIN EN ISO 9001:2008-12	Yes
DIN EN ISO 14971:2013-04	Yes
DIN EN 62304 (VDE 0750-101):2013-10	Yes
EN 61010-2-101:2002	Yes
DIN EN 62638:2010 -08 (VDE 701/702)	Yes
DIN EN 61326-2-6 (VDE 0843-20-2-6): 2006-10	Yes
CE	Yes
FDA 21 CFR Part 11	After consultation
<b>Miscellaneous</b>	
Software licenses	2 additional software licenses included
Time demand for complete analysis	≈3 min for a 96-well enzymatic plate, ≈10 min for a FluoroSpot plate
Maximum number of fluorescent filters	3
Warranty	2 years warranty, Service and Preventative Maintenance Contracts available
Delivery schedule	4-6 weeks after ordering
Installation & on-site training	Included in quoted price

## AID *bacSpot* (BAC04) - Technical Specifications

<b>Hardware</b>	
PC system	High-end PC with Intel Core i5 processor, 4 GB RAM, 500 GB hard disk 24" 16:9 screen
Illumination	Evenly spread, long life LED ring illumination, transmitted and reflected light
Camera resolution and control	5 megapixel, color, firewire-connected
Power input	40 mA @ 240 V/ 50 mA @ 110 V
Footprint	420x320x300 mm (Peripherals not included)
Barcode	On demand
<b>Software</b>	
Operating system	Windows 7 Professional (64 bit)
AID Software	AID BacSpot V2.x
MS Office Version	MS Office 2010 Professional
Additional software solutions included	Colony Counting Software, Zone Sizing Software
<b>Plate formats and assays</b>	
Applicable assays	Colony Counting, Zone Sizing (Agar diffusion test)
Plate formats	60 mm & 90 mm agarose plates. Others after consultation
<b>Certifications/ Validations</b>	
DIN EN ISO 13485:2012 + AC:2012	Yes
DIN EN ISO 9001:2008-12	Yes
DIN EN ISO 14971:2013-04	Yes
DIN EN 62304 (VDE 0750-101):2013-10	Yes
EN 61010-2-101:2002	Yes
DIN EN 62638:2010 -08 (VDE 701/702)	Yes
DIN EN 61326-2-6 (VDE 0843-20-2-6): 2006-10	Yes
CE	Yes
FDA 21 CFR Part 11	After consultation
<b>Miscellaneous</b>	
Max. colonies per plate	up to 5,000
Colony resolution	≥ 0.07 mm
Measurement per plate	1 sec
Software licenses	2 additional software licenses included
Warranty	2 years warranty, Service and Preventative Maintenance Contracts available
Delivery schedule	4-6 weeks after ordering
Installation & on-site training	Included in quoted price

## AID *bacSpot* Robot (BACROB08) - Technical Specifications

<b>Hardware</b>	
PC system	High-end PC with Intel Core i7 processor, 8 GB RAM, ≥ 1TB hard disk 24" 16:9 screen
Illumination	Evenly spread, long life LED ring illumination, transmitted and reflected light
Camera resolution and control	5 megapixel, color, firewire-connected
Power input	230 mA @ 240 V/ 370 mA @ 110 V
Footprint	800x950x500 mm (Peripherals not included)
Barcode	Integrated, automatic
<b>Software</b>	
Operating system	Windows 7 Professional (64 bit)
AID Software	AID BacSpot V2.x
MS Office Version	MS Office 2010 Professional
Additional software solutions included	Colony Counting Software, Zone Sizing Software
<b>Plate formats and assays</b>	
Applicable assays	Colony Counting, Zone Sizing (Agar diffusion test)
Plate formats	90 mm or 60 mm agarose plates. Others after consultation
<b>Certifications/ Validations</b>	
DIN EN ISO 13485:2012 + AC:2012	Yes
DIN EN ISO 9001:2008-12	Yes
DIN EN ISO 14971:2013-04	Yes
DIN EN 62304 (VDE 0750-101):2013-10	Yes
EN 61010-2-101:2002	Yes
DIN EN 62638:2010 -08 (VDE 701/702)	Yes
DIN EN 61326-2-6 (VDE 0843-20-2-6): 2006-10	Yes
CE	Yes
FDA 21 CFR Part 11	After consultation
<b>Miscellaneous</b>	
Max. colonies per plate	up to 5,000
Max. plates per run	100-160
Plates per hour	~ 150-250
Colony resolution	≥ 0.07 mm
Measurement per plate	1-5 sec
Software licenses	2 additional software licenses included
Warranty	2 years warranty, Service and Preventative Maintenance Contracts available
Delivery schedule	4-6 weeks after ordering
Installation & on-site training	Included in quoted price

## Service Overview

### Preventative Maintenance Contracts

AID GmbH offers PM Contracts for AID Reader Systems to cover Preventative Maintenance Visits during manufacturer's warranty period. During the visit an AID service engineer will processes a hardware and software performance check on costumer site and provide a certificate about system conditions.

Please contact AID for details.

### Service Contracts

AID GmbH offers different Service Contracts for AID Reader Systems that are past manufacturer's warranty.

Please contact AID for details.



## Special Features

- **Apple iMAC Versions** for all AID Reader Systems - available on request
- **Uninterruptible Power Supply, UPS** - available on request
- **Barcode Scanner** - available on request
- **Punched Membrane Frame.** For customers who like to reanalyze assays where membranes were punched out of their plastic frame - available on request
- **Customized AID Reader Systems.** Please discuss tailor-made options with us



## AID EliSpot/FluoroSpot Assays

AID offers CE-marked ready to use 96-well plate assays, pre-coated with primary antibody, in a complete kit containing secondary antibody, conjugate and substrate.

In addition, AID also provides a selection of CE-marked ready to use kits for routine diagnostics, specific antigens are already included.

### EliSpot Research Kits - all CE-marked

Customized kits available

Cat.-No.	Product	Format
<b>Human</b>		
ELSP 5000	Interferon- $\gamma$	1 x 96-well plate
ELSP 5050	Interleukin-2	1 x 96-well plate
ELSP 5060	Interleukin-4	1 x 96-well plate
ELSP 5010	Interleukin-5	1 x 96-well plate
ELSP 5040	Interleukin-10	1 x 96-well plate
ELSP 5082	Interleukin-17	1 x 96-well plate
ELSP 5500	Interferon- $\gamma$	1 x 96-well strip plate
ELSP 5650	Interleukin-2	1 x 96-well strip plate
ELSP 5660	Interleukin-4	1 x 96-well strip plate
ELSP 5610	Interleukin-5	1 x 96-well strip plate
ELSP 5400	Interleukin-10	1 x 96-well strip plate
ELSP 5682	Interleukin-17	1 x 96-well strip plate
ELSP 5710	iSpot Assay (FluoroSpot) Interferon- $\gamma$ & Interleukin-2	1 x 96-well plate
ELSP 5720	iSpot Assay (FluoroSpot) Interferon- $\gamma$ & Interleukin-5	1 x 96-well plate
ELSP 5730	iSpot Assay (FluoroSpot) Interferon- $\gamma$ & Interleukin-17	1 x 96-well plate
ELSP 5810	iSpot Assay (FluoroSpot) Interferon- $\gamma$ & Interleukin-2	1 x 96-well strip plate
ELSP 5820	iSpot Assay (FluoroSpot) Interferon- $\gamma$ & Interleukin-5	1 x 96-well strip plate
ELSP 5830	iSpot Assay (FluoroSpot) Interferon- $\gamma$ & Interleukin-17	1 x 96-well strip plate

Cat.-No.	Product	Format
<b>Human</b>		
ELSP 5210	B-cell EliSpot Assay - IgG	1 x 96-well plate
ELSP 5220	B-cell EliSpot Assay - IgA	1 x 96-well plate
ELSP 5230	B-cell EliSpot Assay - IgM	1 x 96-well plate
ELSP 5310	B-cell EliSpot Assay - IgG	1 x 96-well strip plate
ELSP 5320	B-cell EliSpot Assay - IgA	1 x 96-well strip plate
ELSP 5330	B-cell EliSpot Assay - IgM	1 x 96-well strip plate
<b>Mouse</b>		
ELSP 5025	Interferon- $\gamma$	1 x 96-well plate

### EliSpot Kits for routine diagnostics – all CE-marked

Cat.-No.	Product
ELSP 5510	<b>LymeSpot</b> Interferon- $\gamma$ assay for the detection of Borrelia specific T-cells.
ELSP 5520	<b>EBV-Spot</b> Interferon- $\gamma$ assay for detection of Epstein-Barr-Virus (EBV) specific T-cells. Combination of EBV-lytic and EBV-latent peptide mixes.
ELSP 5530	<b>CMV-Spot*</b> Interferon- $\gamma$ assay for detection of Cytomegalovirus (CMV) specific T-cells.
ELSP 5560	<b>TransSpot*</b> Interferon- $\gamma$ assay for monitoring of transplantation patients and for detection of latent/chronic infections important in terms of a planned transplantation.

\*  
CE<sub>0123</sub>

## Manufacturer

### **AID Reader Systems & AID Colony Counter**

Advanced Imaging Devices GmbH  
Ebinger Str. 4  
D-72479 Strassberg  
Germany

### **AID EliSpot/FluoroSpot Assays**

GenID GmbH  
Ebinger Str. 4  
D-72479 Strassberg  
Germany