



Cellogel is a film of cellulose acetate in gel form.
Cellogel is the ideal electrophoretic support for clinical electrophoresis and for the immunological techniques.

Compact high resolution system for clinical electrophoresis

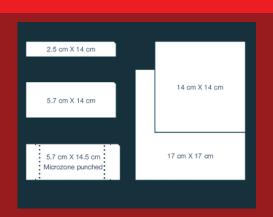
- Designed for routine and research needs
- Easy loading with bridges
- Fully compatible with Cellogel precast gels and kits
- . Complete range of cellulose acetate gels and kits
- Densitometer software and scanner available

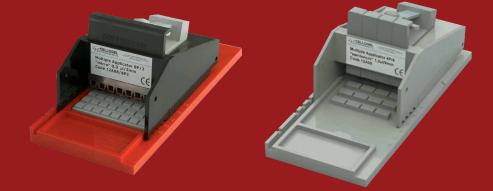
Recommended power supply EV0220 EV1450 Functions with six strips 2.5x14 cm or with three strips 5.7x14 cm on three bridges, model France of 8.5 cm, furthermore it works with the same size strips as above and with sheets 14x14 cm or 18.3x14 cm on an 8.5 cm long bridge with plastic clips.

Injection moulded polycarbonate with high chemical and physical resistance. The lid is in semi-transparent polycarbonate with two magnets which work safety micro-switches and cut off the current when the lid is taken off.

Universal bridges supports Cellogel during sample application by serving as a convenient loading template for the required applicator. Bridges also available for Helena-, Pratiga- and Shandon-type strips and other size formats.

A wide selection of precast gel and strips are available.





Code	Description
EHCA1200-SYS	Horizontal unit for cellulose acetate including 3 bridges 8.5 for Cellogel strips 2.5 x 14 cm and 5.7 x 14 cm, 1 bridge for Cellogel sheets 18.3 x 14 cm
EHCA1200-BR11B06-1	France bridge, 8.5 cm, for strips of 2.5x14 cm or 5.7x14 cm
EHCA1200-BR11B03	Long bridge for sheets of 18.3x14 cm or 14x14 cm and strips of 2.5x14 cm or 5.7x14 cm. Migration field 8.5 cm
EHCA1200-BR11B15-1	France bridge, 11 cm, for strips of 2.5x17 cm or 5.7x17 cm, Rectangular.
EHCA1200-BR11B04	Long bridge for sheets of 17x17 cm and strips of 5.7x17 cm. Migration field 11 cm.
EHCA1200-BR11B14	France bridge, 14 cm, for Cellogel RS Wedge of 5x18.5 cm and 5.7x18.5 cm Rectangular.
EHCA1200-AP08-8P2	8 Sample Micro Applicator
EHCA1200-AP02-SU	2+2 Samples Semimicro Applicator for 2/5 x 14 cm and IFE kit
EHCA1200-AP08-4P4	4 Samples Semimicro Applicator
EHCA1200-AP05	4 Samples Semimicro Applicator
EHCA1200-AP08-4CS	4 Samples Semimicro Applicator for USP CHONDROITIN SULFATE test
EHCA1200-AP08-6P2	6 Samples Semimicro Applicator
EHCA1200-KC30-R	Serum Proteins kit
EHCA1200-KC31	High Resolution Serium Porteins kit
EHCA1200-KC09	IEF Serum + Concentrated urine kit
EHCA1200-KC64	Glycosylated Hemoglobins HbA1c kit
EHCA1200-KC09-02	Immunofixation
EHCA1200-KC35	Hemoglobins
EHCA1200-KC42	Lipoproteins
EHCA1200-SOFT	Turboscan Universal Densitometer Software
EHCA1200-SCAN	Scanner for EHCA1200-SOFT

Compact high resolution system for clinical electrophoresis

Easy loading with bridges

Fully compatible with Cellogel precast gels and kits.

Complete range of cellulose acetate gels and kits

Densitometer software and scanner available

Recommended power supply EV0220 EV1450



# Description

Tank for electrophoresis on Cellogel and cellulose acetate in general. Designed for routine and research needs.

Functions with six strips 2.5x14 cm or with three strips 5.7x14 cm on three bridges, model France of 8.5 cm, furthermore it works with the same size strips as above and with sheets 14x14 cm or 18.3x14 cm on an 8.5 cm long bridge with plastic clips.

The tank and the bridges are injection moulded in polycarbonate with high chemical and physical resistance. The lid is in smoky grey semi-transparent polycarbonate with two magnets which work safety micro-switches and cut off the current when the lid is taken off.

#### Included:

- 3 bridges 8.5 for Cellogel strips 2.5 x 14 cm and 5.7 x 14 cm
- 1 bridge for Cellogel sheets 18.3 x 14 cm

	Description
EHCA1200-SYS	Horizontal unit for cellulose acetate including 3 bridges 8.5 for Cellogel strips 2.5 x 14 cm and 5.7 x 14 cm, 1 bridge for Cellogel sheets 18.3 x 14 cm

## **Bridges for:**

2.5 x 14 cm strips

5.7 x 14 cm strips

18.3 x 14 cm sheets

14 x 14 cm sheets

2.5 x 17 cm strips

5.7 x 17 cm strips

5 x 18.5 cm Cellogel RS Wedge

5.7 x 18.5 cm Cellogel RS Wedge



# Description

A universal bridge supports each 2.5 x 14cm and 5.7 x 14cm Cellogel during sample application by serving as a convenient loading template for the required applicator.

Bridges also available for Helena-, Pratiga- and Shandon-type strips and other size formats

Code	Description	
EHCA1200-BR11B06-1	France bridge, 8.5 cm, for strips of 2.5x14 cm or 5.7x14 cm	
EHCA1200-BR11B03	Long bridge for sheets of 18.3x14 cm or 14x14 cm and strips of 2.5x14 cm or 5.7x14 cm. Migration field 8.5 cm	
EHCA1200-BR11B15-1	France bridge, 11 cm, for strips of 2.5x17 cm or 5.7x17 cm, Rectangular.	
EHCA1200-BR11B04	Long bridge for sheets of 17x17 cm and strips of 5.7x17 cm. Migration field 11 cm.	
EHCA1200-BR11B14	France bridge, 14 cm, for Cellogel RS Wedge of 5x18.5 cm and 5.7x18.5 cm Rectangular.	

Unlike dry cellulose acetate strips that are restricted to low volume micro tests, Cellogel's greater thickness allows tests to be performed on semi-micro and macro scales using a wide range of specialist applicators.











# Description

Unlike dry cellulose acetate strips that are restricted to low volume micro tests, Cellogel's greater thickness allows tests to be performed on semi-micro and macro scales using a wide range of specialist applicators. Consequently greater sample-volumes may be loaded as larger, but finer bands over a wider front. This reduces sample saturation and aids densitometric band quantitation, thereby improving resolution.

Code	Description	Volume	Band width	Strip Size
EHCA1200-AP08-8P2	8 Sample Micro Applicator	0.3 µl	5 mm	5.7 x 14cm
EHCA1200-AP02-SU	2+2 Samples Semimicro Applicator for 2/5 x 14 cm and IFE kit	0.7 µl	7 mm	
EHCA1200-AP08-4P4	4 Samples Semimicro Applicator	0.9 µl	7 mm	
EHCA1200-AP05	4 Samples Semimicro Applicator	1.2 µl	9 mm	
EHCA1200-AP08-4CS	4 Samples Semimicro Applicator for USP CHONDROITIN SULFATE test	0.5 µl	7 mm	
EHCA1200-AP08-6P2	6 Samples Semimicro Applicator	0.7 µl	7 mm	

## Serum Proteins EHCA1200-KC30-R

The EHCA1200-KC30-R kit is intended for the diagnostic clinical electrophoresis of serum proteins for detecting disproteinemias and for quantitating Albumin, Alpha-1, Alpha-2, Transferrin, C3 and Gammaglobulins.

#### Assessment:

4 semimicro or 8 micro tests per each Cellogel 5.7x14 cm strip.

12 semimicro tests or 24 micro tests per each Cellogel chamber.

#### Kit content (100 semimicro or 200 micro tests):

Cellogel, Tris-Hippurate buffer, Ponceau S staining, Destaining solution, Clearing solution, blotting paper and Mylar film

## High Resolution Serum Proteins EHCA1200-KC31

Several prestigious authors (Drs. Kohn, Laurell, Aguzzi, Keren et. al.) have not accepted the 20 mm micro electrophoresis of proteins since this technique is not sufficient for diagnosis of gammapathies. HR methods such as Microlong electrophoresis on Cellogel show up to 13 fractions, and have been proposed for diagnosis of incipient gammapathies. In accordance with the Italian Commission for Proteins of SIBioC and some of the most authoritative European experts.

#### Assessment:

6 semimicro or 8 micro tests per each Cellogel 5.7x14 cm strip.

48 high resolution tests with 6 Cellogel strips placed on 2 Cellogel chamber.

#### Kit content (150 semimicro or 200 micro tests):

Cellogel, TGS buffer, Coomassie staining, Citric Acid, Clearing solution blotting paper and Mylar film.

Not included: Destaining solution (475ml Methanol + 475ml H2O + 50ml Glacial Acetic Acid).

## IEF Serum + Concentrated urine EHCA1200-KC09

Simultaneous immunofixation of serum and urine of 1 patient is recommended as unique method for an absolutely certain diagnosis able to observe gammapathies of uncertain significance (MGUS) or the malignancy of the gammapathy, with the presence of a K free or Lambda free monoclonal, or secondary malignancy for evident kidney disease with the presence of an IgG, IgA or IgM monoclonal component in the IFE of serum and urine with relative positivity of alligned K (bound) or Lambda (bound).

This method, proposed in 1984 and appreciated from many SIBioC members, doesn't use anti K free and anti Lambda free to reveal Bence-Jones protein and respects the guide lines for IFE of the Bence-Jones proposed for urine alone with trivalent anti-serum (anti IgG, anti IgA, anti IgM), anti K Bound & Free and anti Lambda Bound & Free published in Biochimica Clinica, 2001, vol.25, No. 1, pages 23-31

#### Assessment:

2 test HRE for each patient in semimicro technique on 6 Cellogel 2.5x14 cm strip placed on 3 bridges in one Cellogel chamber.

#### Kit content (5+5 tests for 5 patients):

Cellogel, TGS buffer, Coomassie staining, Saline solution, Volumetric distributors and Antisera, Clearing solution, blotting paper and Mylar film.

Not included: Destaining solution (475ml Methanol + 475ml H2O + 50ml Glacial Acetic Acid).

# Glycosylated Hemoglobins HbA1c EHCA1200-KC64

According to a publication of J. Ambler et al., the non-glycosilated part of Hemoglobin in citrate buffer pH 6.4 containing dextrane sulphate acquires a mobility such as to allow a perfect separation of the glycosilated part. This occurs as the sulphate groups of dextrane combine with non-glycosilated hemoglobin.

#### **Assessment:**

4 semimicro per each Cellogel 5.7x14 cm strip.

12 semimicro tests per each Cellogel chamber.

## Kit content (100 semimicro tests):

Cellogel, Affinity buffer pH 6.4, Hemolysing solution, Ponceau S staining, Destaining solution, Clearing solution, blotting paper, Mylar film and 1 mini box.

## Immunofixation EHCA1200-KC09-2

The EHCA1200-KC09-2 kit is intended for the separation and identification of monoclonal gammapathies. When a monoclonal band is revealed by electrophoresis or when an immunoproliferative disorder is suspected, immunofixation of monoclonal components is basic, either to establish true monoclonality of a band, or to establish the nature of the monoclonal component and fix it. In fact different types have different diagnostic and prognostic value.

#### Assessment:

6 semimicro tests or 8 micro tests on 6 Cellogel 5.7x14 cm strips placed on 6 bridges in two Cellogel chamber.

#### Kit content (24 semimicro or 32 micro tests):

Cellogel, Tris- Hippurate buffer, Amidoblack staining, Saline solution, Volumetric distributors and Antisera, Clearing solution, blotting paper and Mylar film.

Not included: Destaining solution (475ml Methanol + 475ml H2O + 50ml Glacial Acetic Acid).

## Hemoglobins EHCA1200-KC35

Electrophoresis of Hemoglobins is a simple laboratory technique for the rapid and accurate detection of abnormal conditions, called hemoglobinopathies. It can reveal the possible existence of hemoglobinopathies in two ways, qualitatively, by indicating the presence or absence of variant hemoglobins, and quantitatively, by making possible the measurement of hemoglobins by densitometry.

The electrophoretic separation of hemoglobins is based on the electrical characteristic of the globin molecule which can be negatively or positively charged depending on the amino acid sequence or composition of the polypeptide chains. Differences in the electrostatic charge will produce differences in electrophoretic mobilities and, hence, separation of the various hemoglobins

#### **Assessment:**

4 semimicro per each Cellogel 5.7x14 cm strip.

12 semimicro tests per each Cellogel chamber.

## Kit content (100 semimicro tests):

Cellogel, Tris-Glycine buffer, Ponceau S staining, Destaining solution, Clearing solution, blotting paper, Mylar film and 1 mini

## Lipoproteins EHCA1200-KC42

The EHCA1200-KC42 kit is intended for clinical electrophoresis of serum Lipoproteins and evaluation of HDL (Alpha lipo), VLDL (pre ß lipo), LDL (ß lipo) and Chylomicrons fractions.

Hyperlipoproteinemias may be categorized into 5 types according to Fredrickson et Al. by simple observation of electrophoretic pattern, serum appearance and determination of values of Cholesterol and Tryglyceride.

Cellogel is widely used in the world for Lipoproteins testing. More than 20 scientific works have been published on international magazines. Main advantage of Cellogel versus dry Cellulose Acetate or Agarose is the right porosity (Chylomicrons can not penetrate or permeate Cellogel membrane), the suitable thickness of 250-300 microns and combination of both hydrophobic and hydrophilic properties of gelatinized cellulose acetate.

### Assessment:

4 semimicro per each Cellogel 5.7x14 cm strip.

12 semimicro tests per each Cellogel chamber.

#### Kit content (100 semimicro tests):

Cellogel, Tris Hippurate buffer, Sudan Black staining, Clearing solution, blotting paper, Mylar film and 1 mini box.

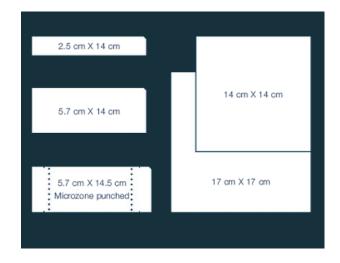
Code	Description	Diagnostic Application
EHCA1200-KC30-R	Serum Proteins kit	Dysproteinaemia;Albumin,Alpha-1, Alpha-2,Transferrin, C3 & Gamma Globulin Quantitationl
EHCA1200-KC31	High Resolution Serium Porteins kit	Incipien Gammopathies
EHCA1200-KC09	IEF Serum + Concentrated urine kit	MGUS, MM
EHCA1200-KC64	Glycosylated Hemoglobins HbA1c kit	Haemoglobinopathies
EHCA1200-KC09-02	Immunofixation	MGUS, MM
EHCA1200-KC35	Hemoglobins	Haemoglobinopathies
EHCA1200-KC42	Lipoproteins	Hyperlipidaemias

Cellogel is a film of cellulose acetate in gel form.

Cellogel is the ideal electrophoretic support for clinical electrophoresis and for the immunological techniques.

Cellogel is an electrophoretic medium which separates the proteins, even at high resolution, according to the electric charge and does not have the effects of molecular filtration typical of other gels like polyacrylamide.

Cellogel is packed in strips and sheets of various dimensions.



Cellogel is ready for buffering and does not entrap air at the moment of immersion into the electrophoretic buffers.

In comparison with dry acetate, with a thickness from 120 to 160 microns, Cellogel is produced with thicknesses between  $190\mu$  up to  $500\mu$  depending on what it is to be used for. The greater the thickness, greater is the volume of the specimen which can be deposited on it. Furthermore, higher thickness corresponds, with the same voltage applied during electrophoresis and with the same ionic strength of the buffer, to a higher passage of current measured in mA x strip.

With Cellogel there is the possibility to apply specimens with a volume of  $0.9\mu$ l/9 mm (semimicro method) or of  $2\mu$ l/18 mm (micro method) without the sample spreading as would occur on a very thin dry acetate strip which tolerates micro applications of  $0.25\mu$ l/4 mm well but lets the semi-micro and macro deposits spread unacceptably. The application can be repeated two or three times on the same spot on Cellogel, when necessary, as in the case of electrophoresis of isoenzymes and of biological liquids poor in proteins.

Dry acetate is limited to the migrations of 20 mm of miniaturised micro electrophoresis or at most of 30 mm with a quasi-semi-micro carried out with stamp applicators and their relative dispocards. Cellogel, however, is suitable for standard migrations of semi-micro 35 mm serum proteins, with 45 mm semi-micro with prolonged migrations or high resolution electrophoresis with 60-70 mm migrations or more.

HRE (high resolution electrophoresis) is only possible on Cellogel and not on dry acetates. HRE on Cellogel is much simpler and easier than on agarose; the expensive systems for the circulation of cold water or Peltier control which are needed for all the commercial agarose gels with a thickness of 500 microns are not required with Cellogel. HRE on Cellogel has a cost per test equal to a semi-micro test on acetate and does not have the prohibitive costs of agarose which is only produced in kits of 10 or maximum 15 tests per film, which cannot be proposed for the routine of large and medium size laboratories. With French agarose it is only possible to carry out 10 tests/hour, with American agarose 15 tests/hour, while with Cellogel it is possible to perform up to 48 test/hour; furthermore HRE on agarose presents itself with migrations containing a floating \(\mathbb{G}\)-lipoproteins fraction focused, sometimes, overlapped on a small monoclonal band. In practice, high resolution on agarose is a time consuming system as well as being defective. Cellogel, like agarose, offers resolutions that depend on the length of the migrations. Making a deposit of 0.9µl on a line 9 mm long and 1.5 mm wide (semi-micro deposit):

- After 35 mm movement of albumin the serum proteins migration shows 5-6 fractions
- After 50 mm it shows 7-9 fractions
- · After 65 mm it shows 9-13 fractions
- After 110 mm it shows between 11 and 23 fractions

Chemically Cellogel is a film of water made of from 7-8% of solid cellulose acetate and 92-93% H2O of which 60-70% is constitution H2O bound with hydrogen bridges, and 20-30% water for impregnation of the pores. The evaporation and water transport onto the membrane during prolonged electrophoresis is better regulated, the evaporation of the constitution water bound by the hydrogen bridge is much slowed down and this facilitates long migrations which are impossible on dry acetate. The porosity of Cellogel is predisposed for the main analysis, that is electrophoresis of the serum proteins. Large molecules like pre-ß-lipoproteins and all the other serum proteins penetrate and migrate. Only the chylomicrons do not penetrate or migrate and only leave a mark at the start point, the same occurs with immunocomplexes and cryoglobulins when present; these marks which are analytically and diagnostically important, cannot be seen on the French agarose which uses filtering applicators.

The predisposed porosity of Cellogel is decisive in avoiding spreading of samples at the moment of depositing and spreading of the fractions with low mobility during migrations which can be lengthy. All in all the right porosity corrects the insufficiencies of other commercial cellulose acetates membranes. To this must be added the better compatibility between Cellogel and serum proteins, including lipoproteins, that are incompatible with agarose. The latter is, in fact, a film of water (99% H2O) totally hydrophilic, where the amphiphilic serum proteins with more lipophilic characteristics remain floating on the surface even when the sample is deposited with applicators which cut the gel. The superiority of Cellogel over agarose was recognised in numerous publications by important authors between 1963 and 1971. Thanks to its amphiphilic properties (hydrophilic and lipophilic) Cellogel has optimal compatability with specimens as difficult and complex as serum proteins, which are also amphiphilic. Cellogel is, therefore, the ideal support for electrophoresis of serum proteins, hemoglobins, lipoproteins, isoenzymes, for all the immuno-electrophoretic techniques and for the search for antigens, antibodies and tumour markers (especially those immunofixable with polyclonal antibodies).

# Ordering codes Cellogel Strips

Code	Size (cm)	Description
EHCA1200-ST01-100	2.5x12	Cellogel 250µ
EHCA1200-ST02-100	2.5x12	Cellogel 200µ
EHCA1200-ST03-100	2.5x12	Cellogel 190µ for High Resolution
EHCA1200-ST06-100	2.5x14	Cellogel 250µ
EHCA1200-ST06-25	2.5x14	Cellogel 250µ
EHCA1200-ST07-100	2.5x14	Cellogel 200µ
EHCA1200-ST08-100	2.5x14	Cellogel 190µ for High Resolution
EHCA1200-ST11-100	2.5x17	Cellogel 250µ
EHCA1200-ST11-25	2.5x17	Cellogel 250µ
EHCA1200-ST12-100	2.5x17	Cellogel 200µ
EHCA1200-ST12-25	2.5x17	Cellogel 200µ
EHCA1200-ST13-100	2.5x17	Cellogel 190µ for High Resolution
EHCA1200-ST16-100	4x12	Cellogel 250µ
EHCA1200-ST17-100	4x12	Cellogel 200µ
EHCA1200-ST18-100	4x12	Cellogel 190µ for High Resolution
EHCA1200-ST21-100	4x17	Cellogel 250µ
EHCA1200-ST22-100	4x17	Cellogel 200µ
EHCA1200-ST23-100	4x17	Cellogel 190µ for High Resolution
EHCA1200-ST26-25	5x30	Cellogel 250µ
EHCA1200-ST27-25	5x30	Cellogel 200µ
EHCA1200-ST28-25	5x30	Cellogel 190µ for High Resolution
EHCA1200-ST29-25	5.7x13	Cellogel 250µ Pratiga punched
EHCA1200-ST29U-25	5.7x13	Cellogel 250µ
EHCA1200-ST30-25	5.7x13	Cellogel 200µ Pratiga punched
EHCA1200-ST31-25	5.7x14	Cellogel 250µ
EHCA1200-ST32-25	5.7x14	Cellogel 200µ
EHCA1200-ST33-25	5.7x14	Cellogel 190µ for High Resolution
EHCA1200-ST34-25	5.7x14	Cellogel 500µ
EHCA1200-ST36-100	5.7x14	Cellogel 250µ
EHCA1200-ST37-100	5.7x14	Cellogel 200µ
EHCA1200-ST38-100	5.7x14	Cellogel 190µ for High Resolution
EHCA1200-ST42-25	5.7x14	Cellogel 250µ Pratiga punched
EHCA1200-ST43-100	5.7x14	Cellogel 200µ Pratiga punched
EHCA1200-ST43-25	5.7x14	Cellogel 200µ Pratiga punched
EHCA1200-ST44-25	5.7x14	Cellogel 190µ Pratiga punched for High Resolution
EHCA1200-ST45-25	5.7x14	Cellogel 500µ Pratiga punched
EHCA1200-ST52-25	5.7x14.5	Cellogel 250µ Beckman punched
EHCA1200-ST53-100	5.7x14.5	Cellogel 200µ Beckman punched
EHCA1200-ST53-25	5.7x14.5	Cellogel 200µ Beckman punched
EHCA1200-ST54-25	5.7x14.5	Cellogel 190µ Beckman punched for High Resolution
EHCA1200-ST57-25	2.55x14.5	Cellogel 250µ Boskamp
EHCA1200-ST58-25	2.55x14.5	Cellogel 200µ Boskamp
EHCA1200-ST59-25	2.55x14.5	Cellogel 190µ Boskamp for High Resolution
EHCA1200-ST62-25	7.8x15	Cellogel 250µ Shandon
EHCA1200-ST63-25	7.8x15	Cellogel 200µ Shandon
EHCA1200-ST64-25	7.8x15	Cellogel 190µ Shandon for High Resolution
EHCA1200-ST67-25	5.7x15	Cellogel 250µ
EHCA1200-ST68-25	5.7x15	Cellogel 200µ
EHCA1200-ST69-25	5.7x15	Cellogel 190μ for High Resolution
EHCA1200-ST77-100	5.7x17	Cellogel 250µ

# Ordering codes Cellogel Sheets

Code	Size (cm)	Description
EHCA1200-SH01-10	10x17	Cellogel 250µ
EHCA1200-SH02-10	10x17	Cellogel 200µ
EHCA1200-SH03-10	10x17	Cellogel 190µ for High Resolution
EHCA1200-SH04-10	10x17	Cellogel 500µ
EHCA1200-SH06-10	14x14	Cellogel 200m for 2D Immunoelectrophoresis
EHCA1200-SH07-10	16.5x14	Cellogel 250µ
EHCA1200-SH08-10	16.5x14	Cellogel 200µ
EHCA1200-SH09-10	16.5x14	Cellogel 190µ for High Resolution
EHCA1200-SH10-10	16.5x14	Cellogel 500µ
EHCA1200-SH12-10	17x17	Cellogel 250µ
EHCA1200-SH13-10	17x17	Cellogel 200µ
EHCA1200-SH14-10	17x17	Cellogel 190µ for High Resolution
EHCA1200-SH15-10	17x17	Cellogel 500µ
EHCA1200-SH17-10	20.5x20.5	Cellogel 250µ
EHCA1200-SH18-10	20.5x20.5	Cellogel 200µ
EHCA1200-SH19-10	20.5x20.5	Cellogel 190µ for High Resolution
EHCA1200-SH20-10	20.5x20.5	Cellogel 500µ
EHCA1200-SH22-10	30x30	Cellogel 250µ
EHCA1200-SH23-10	30x30	Cellogel 200µ
EHCA1200-SH24-10	30x30	Cellogel 190µ for High Resolution
EHCA1200-SH25-10	30x30	Cellogel 500µ
EHCA1200-SH27-10	18.3x14	Cellogel 190µ for High Resolution
EHCA1200-SH28-10	18.3x14	Cellogel 200µ
EHCA1200-SH32-10	18.3x17	Cellogel 190µ for High Resolution
EHCA1200-SH33-10	18.3x17	Cellogel 250µ

### TurboScan. The universal and flexible high-performance densitometer for your clinical laboratory.

Universal and flexible analysis equipment for the clinical laboratory The latest digital image analysis technology

Analysis programs and analysis masks can be individually defined Irrespective of filters, special light sources or staining methods

High resolution and excellent reproducibility

High analysis speed

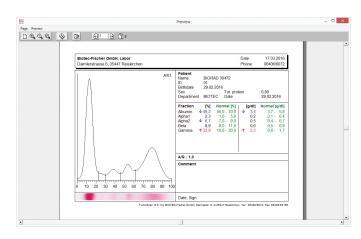
Extremely simple to handle and comfortable to use

Reliable, reproducible results

Analysis results clearly displayed on the monitor

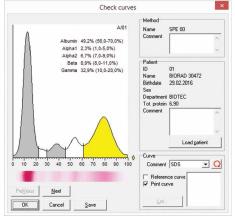
Clear printout of results

Software runs under, XP / VISTA / Win 7



TurboScan. The new generation of densitometers. Once again Biotec-Fischer is leading the way in modern analysis technology with the digital analysis system TurboScan. No other system offers comparable flexibility and comfort. The TurboScan translates users' expectations of a densito meter into reality. Non-essential gadgets have deliberately been left out. Functionality, reliability and operator comfort are the maxims.

Universal use. In terms of flexibility, TurboScan puts all previous systems in the shade. It allows you to create as many individually generated scan masks as you wish. You can also select as many analysis methods as you wish. No other system offers so many options. In clinical work, for example, you can use TurboScan for analysis in the following applications: serum protein electrophoresis, lipo-protein electrophoresis, haemoglobin electrophoresis, Hb-A1 electrophoresis, urine electrophoresis, CSF electrophoresis, Bence-Jones, iso-enzymes, iso-electric focusing, multifractional electrophoresis, blots and lots more. It does not matter wether you carry out your methods on dry or wet cellulose acetate strips, on agarose and on other gels or you work with micro, semi-micro or macro application.



Digital image analys. technology for reliable results. TurboScan uses the latest digital image

analysis technology. The advantages to you are obvious: analysis only takes a fraction of the time and the results obtained are reliable with excellent reproducibility. At the same time TurboScan is based on commercial hardware components. The advantage to you - you can use existing PC hardware and save costs.

Perfect analysis. TurboScan has a very high analysis speed. An A4 page is scanned in only 15 seconds. For the standard template with 64 traces, this means an average scanning speed of of 0.23 seconds per separation. The high resolution guarantees reliable results with excellent reproducibility. The analysis data are clearly presented on the colour monitor. The printout shows all the relevant data in a clear form, starting with the image of separation, the graphs, then the laboratory and patient data through to the results in percentages and absolute figures, the normal ranges and your comments.

Easy to operate. In most laboratories, lack of time is a major problem, so careful attention was paid to this aspect when developing the TurboScan. Despite its flexibility and multiple options, it is therefore simple and comfortable to operate. Even under pressure, you will easily find your way round the TurboScan and sources of error are greatly reduced.

The TurboScan software. The TurboScan software lies at the hart of the system. It reflects more than 30 years' experience in this field of electrophoresis analysis. TurboScan automatically recognizes the fractions and assignments present. Each individual separation is automatically coded and every fraction outside the normal range is automatically identified optically. You merely have to look up the result and interpret it. As a matter of course, TurboScan offers you a variety of correction possibilities. You can easily set or delete minimums, correct the baseline, curves of graphs or the albumin factor. After any amendment, TurboScan naturally recalculates all the data for you.

With data processing connection. You can easily connect TurboScan to your DP unit via bi-directional RS-232 interface. This guarantees data exchange between TurboScan and your DP equipment.

## Specifications

TurboScan software on CD-ROM PC (Celeron), 256 MB RAM, scanner and inkjet printer WINDOWS (98 / NT / 2000 / XP / VISTA) Patients' Details: first and family name, DOB, sex, ID number, department, total serum protein, comments Analysis: automatic fraction recognition and assignment, automatic coding of each separation, labelling of fractions

outside the normal range Corrections: set or delete minimums, baseline correction,

graph correction, albumin correction

Printout: in A5 format with illustration of the separation, the graphs, patient's details, laboratory data, analysis results in percentages and absolute figures, normal ranges, total serum protein, comments DP Connection: via RS-232 interface, bi-directional

Masks: A4 format, create, save and retrieve as many individually created masks as you wish

Methods: create, save and retrieve as many individually generated analysis methods as you wish; tolerance range for automatic fraction recognition can be freely selected; automatic correction factors for each method can be freely selected

Code	Description
EHCA1200-SOFT	Turboscan Universal Densitometer Software
EHCA1200-SCAN	Scanner for EHCA1200-SOFT