

## AH/AHS-N Range Semiautomatic Autoclaves



AH-21 N2



AHS-50 N

## AH/AHS-N Range

**N Class:** Suitable to sterilize: culture media, glass, liquids, plastic, metallic elements, waste bags, etc.

### Operating Principal

AH/AHS-N table-top range provides a single solution for the multiples sterilization needs on laboratories including liquids, culture media, biological waste, contaminated media, instruments, glassware and other laboratory items.

Load has to be placed into the vessel's baskets and, after manual filling with distilled water, device starts to heat up and purge until set temperature is reached. In case of solid objects, discharge can be manually forced during cooling stage to reduce cycle time.

### Digital Microprocessor

Digital microprocessor for an easy programming and parameters selection for sterilization process.



### Programs

Microprocessor has 10 programs, from P0 to P9, and the first four are pre-defined and protected.

| Program N° | Temperature (°C) | Pressure (bar) | Sterilization time (min.) | Sterilization mode |
|------------|------------------|----------------|---------------------------|--------------------|
| <b>P0</b>  | 115              | 0,6            | 60                        | SOLIDS-1           |
| <b>P1</b>  | 121              | 1,1            | 30                        | SOLIDS-1           |
| <b>P2</b>  | 133              | 2,1            | 20                        | SOLIDS-1           |
| <b>P3</b>  | 121              | 1,1            | 20                        | LIQUIDS-1          |

The rest of the programs are user-defined with the following parameters setting:

- Sterilization temperature
- Sterilization time
- Heart probe selection

## AH/AHS-N Range

### Sterilization Process

**Heating Stage** – Fast saturated steam production by means of powerful heating elements.

**Sterilization Control** – A PT-100 temperature probe controls the chamber temperature, with the possibility of installing another flexible PT-100 temperature probe for liquid programs.

**Cooling Stage** – In solid program, discharge can be manually forced during cooling stage to reduce the cycle time.

### Security

All safety standards are covered with safety valve, safety thermostat and safety pressure switch, door opening prevention system in case of overpressure, open door sensor and water level detector. EU Directive and Standards:

**2014/35/UE** *Low Voltage*

**2014/30/UE** *Electromagnetic Compatibility*

**2014/68/UE** *Pressure Equipment*

**EN-61010-1**

**EN-61010-2-040**

**EN-61326**

**AD 2000 Merkblatt**

### Communications and Documentation

**RS-232 Port** – For live monitoring of sterilization cycle directly to PC. It is needed the customized software SW7000 (optional).



## AH/AHS-N Range

**Integrated Printer** (optional) – For quality printouts after each cycle. Intervals can be adjustable. Printer has to be requested before ordering.

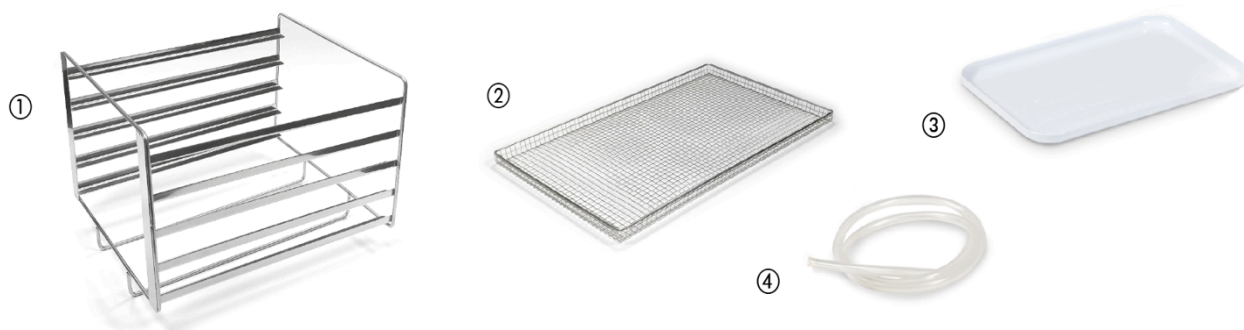
### Components supplied with the autoclave AH-21 N2

1. Tray support for four trays.
2. Three stainless steel perforated trays. Ref. BAH-21
3. Auxiliary tray.
4. A holding clamp.
5. 1.5 m flexible tube to drain condensation reservoir.



### Components supplied with the autoclaves AHS-50/75 N

1. Support for five trays.
2. Two perforated trays made of stainless steel. Ref. BAH-B
3. Auxiliary tray.
4. 1.5 m flexible tube to drain condensation reservoir.



## AH/AHS-N Range

### Technical Data

| Referencia<br>Reference<br>Référence | Volumen total / útil<br>Total volume / usable<br>Volume total / utile | Ø x H mm  | L x D x H mm     | Temp. °C | Presión máx. bar<br>Max. pressure bar<br>Pression max. bar | W    | Kg  | Rango tiempo<br>Time range<br>Rang de temps |
|--------------------------------------|---|-----------|------------------|----------|--|------|-----|---|
| <b>AH-21 N2</b>                      | 22/21   | 250 x 430 | 560 x 660 x 425  | 100-134  | 2,1  | 2000 | 55  | 0 - 500 h                                   |
| <b>AHS-50 N</b>                      | 55/50   | 400 x 400 | 805 x 805 x 650  | 100-134  | 2,1  | 2800 | 95  | 1' - 250'                                   |
| <b>AHS-75 N</b>                      | 79/75   | 400 x 600 | 805 x 1005 x 650 | 100-134  | 2,1  | 3200 | 110 | 1' - 250'                                   |

AHS-50/75-N models with closing wheel

Electrical connection for equipment of 21, 50 and 75 L: 230V (1P + N), 50/60 Hz.  
Possibility of modifying the voltage on request.

Audible and visible end-of-cycle sterilization indicator

### Accessories

#### BANDEJAS PERFORADAS EN ACERO INOXIDABLE / STAINLESS STEEL PERFORATED TRAYS / PLATEAUX PERFORÉS EN ACIER INOXYDABLE

| Para autoclave de<br>For autoclave of<br>Pour autoclave de | Referencia<br>Reference<br>Référence | EXTERIOR<br>L x D mm | Nº bandejas / autoclave<br>No. shelves / autoclave<br>Nº plateau / autoclave |
|--|--------------------------------------|----------------------|--|
| 21 L   | <b>BAH-21*</b>                       | 190 x 350            | 5  |
| 50 L   | <b>BAH-50 B*</b>                     | 315 x 330            | 5  |
| 75 L   | <b>BAH-75 B*</b>                     | 315 x 530            | 5  |



\* Para autoclaves horizontales / For horizontal autoclaves / Pour autoclaves horizontaux

#### SOPORTE PORTABOLSAS / BAG SUPPORT / SUPPORT POUR LES SACHETS STÉRILISATION

| Referencia<br>Reference<br>Référence | Capacidad ud.<br>Capacity ut.<br>Capacité un. | L x D x H mm   |
|--------------------------------------|---|----------------|
| <b>BAP-21*</b>                       | 8   | 400 x 180 x 80 |



\* Para autoclaves horizontales 21L / For horizontal autoclaves 21L / Pour autoclaves horizontaux 21L

#### CONTENEDORES EN ACERO INOXIDABLE / STAINLESS STEEL CONTAINERS / CONTENEURS EN ACIER INOXYDABLE

| Referencia<br>Reference<br>Référence | Descripción<br>Description<br>Description   | L x D x H mm    | N.º contenedores / autoclave*                          |      |      |
|--------------------------------------|---|-----------------|--|------|------|
|                                      |   |                 | No. containers / autoclave<br>Nº conteneur / autoclave | 21 L | 50 L |
| <b>FC-215</b>                        | Contenedor de acero inox con filtro en la tapa<br>Stainless steel container with filter on the lid<br>Conteneur en acier inoxydable avec filtre<br>sur le couvercle | 285 x 185 x 65  | 2  | 6    | 9    |
| <b>FC-331</b>                        |   | 300 x 300 x 110 | -  | 1    | 2    |
| <b>FC-338</b>                        |   | 300 x 300 x 85  | -  | 2    | 4    |



\* Para autoclaves horizontales / For horizontal autoclaves / Pour autoclaves horizontaux

## AH/AHS-N Range

### Accessories

#### SONDA "CORAZÓN" PT-100

- Recomendada para esterilizaciones de líquidos en frascos de 1 litro o más.
- El control se efectúa desde el microprocesador.
- Este accesorio debe ser instalado en fábrica.

Referencias: **PT-2** y **PT-2-AH-21** para autoclave **AH-21**

#### FLEXIBLE "HEART" PROBE PT-100

- Recommended for sterilizing liquids in flasks of 1 litre or bigger.
- The control is done from the microprocessor.
- This accessory should be installed in factory.

Referencias: **PT-2** and **PT-2-AH-21** for **AH-21** autoclave

#### SONDE PT-100 FLEXIBLE

- Recommandée pour la stérilisation de liquides en flacons de 1 litre ou plus.
- Le contrôle se fait depuis le microprocesseur.
- Cet accessoire doit être installé en usine.

Références: **PT-2** et **PT-2-AH-21** pour autoclave **AH-21**



#### PRENSAESTOPA 1/2"

- Para la calibración de autoclaves.

Referencias:  
**PRENSACLAV**  
(8 taladros Ø 2mm)  
**PRENSACLAV2**  
(8 taladros Ø 4mm)

#### CABLE GLAND 1/2"

- For autoclave calibration.

Referencias:  
**PRENSACLAV**  
(8 holes Ø 2mm)  
**PRENSACLAV2**  
(8 holes Ø 4mm)

#### PRESSE-ÉTOUPE 1/2"

- Pour le calibrage de l'autoclave.

Références:  
**PRENSACLAV**  
(8 des trous Ø 2mm)  
**PRENSACLAV2**  
(8 des trous Ø 4mm)



#### IMPRESORA TÉRMICA INTEGRADA\*

- Imprime el número de programa, números de ciclo, temperatura, tiempo, fecha y hora de cada esterilización, y los mensajes de error.
- Este accesorio debe ser instalado en fábrica.

Referencias:  
**IT**: Pantalla LCD  
**IT/TS**: Pantalla táctil

#### THERMAL PAPER PRINTER\*

- It prints program number, cycle number, temperature, date and hour of the run, and error messages.
- This accessory should be installed in factory.

Referencias:  
**IT**: LCD Screen  
**IT/TS**: Touch Screen

#### IMPRIMANTE À PAPIER THERMIQUE\*

- Imprime le numéro de programme, numéro de cycle, température, date et heure de chaque stérilisation, et les messages d'erreur.
- Cet accessoire doit être installé en usine.

Références:  
**IT**: Ecran LCD  
**IT/TS**: Ecran tactile



\*No disponible para AES-8 y AH-21-N2 / Not available for AES-8 and AH-21-N2 / Non disponible pour AES-8 et AH-21-N2

#### IMPRESORA DE SOBREMESA\*

- Imprime el número de programa, números de ciclo, temperatura, tiempo, fecha y hora de cada esterilización, y los mensajes de error.
- Incorpora conexión RS-232.
- No compatible con circuitos de pantalla táctil.

Referencia: **ITS**

#### TABLE TOP PRINTER\*

- It prints program number, cycle number, temperature, date and hour of the run, and error messages.
- RS-232 connection.
- Not compatible with touch screen circuits.

Reference: **ITS**

#### IMPRIMANTE DE TABLE\*

- Imprime le numéro de programme, numéro de cycle, température, date et heure de chaque stérilisation, et les messages d'erreur.
- Port de connexion RS-232.
- Non compatible avec les circuits à écran tactile.

Référence: **ITS**



\*No disponible para AES-8 y AH-21-N2 / Not available for AES-8 and AH-21-N2 / Non disponible pour AES-8 et AH-21-N2



## AH/AHS-N Range

### Accessories

#### KIT CONEXIÓN PC SW7000

- Software de comunicación entre el equipo y el PC.
- Conexión vía RS-232.
- Adaptador USB.
- No compatible con circuitos de pantalla táctil.

Referencia: **SW7000\***

\* Serie AES, AE-DRY

#### PC CONNECTION SW7000

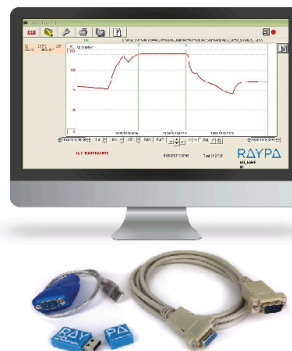
- Communication software between the equipment and the PC.
- Connection for RS-232.
- USB Adapter.
- Not compatible with touch screen circuits.

Reference: **SW7000\***

#### KIT DE CONNEXION SW7000

- Logiciel de communication entre l'équipement et le PC.
- Connexion pour RS-232
- Adaptateur USB.
- Non compatible avec les circuits à écran tactile.

Référence: **SW7000\***



#### INDICADOR DE ESTERILIZACIÓN EN CINTA ADHESIVA

- Indicador químico para vapor. El cambio de color indica que los materiales han sido procesados, sin ser garantía de una correcta esterilización. Clase 1.
- Para comprobar que la esterilización es efectiva se necesitan métodos adicionales como indicadores biológicos EN ISO 11138.
- Rollo de cinta de 50 m x 19 mm

Referencia: **TEST-CT\***

\* Todos los modelos / All models / Tous les modèles

#### STERILIZATION CONTROL TAPE

- Chemical indicator for steam. The change of color indicates that the materials have been processed, without being a guarantee of proper sterilization. Class 1.
- To verify that sterilization is effective, additional methods are needed as biological indicators EN ISO 11138.
- Tape roll of 50 m x 19 mm

Reference: **TEST-CT\***

#### RUBAN AUTOCLAVE

- Indicateur chimique pour la vapeur. Le changement de couleur indique que les matériaux ont été traités, sans être une garantie de stérilisation appropriée. Classe 1.
- Pour vérifier que la stérilisation est efficace, des méthodes supplémentaires sont nécessaires en tant qu'indicateurs biologiques EN ISO 11138.
- Rouleau de ruban adhésif de 50 m x 19 mm

Référence: **TEST-CT\***



**20 MIN. 121°C**

Viraje de color / color change  
/ changement du couleur