



# ES SERIES

Cooled Incubators



**N-s<sub>2</sub>art**



*ES Series Cooled Incubators are designed to attain freezing, incubation, drying and test temperatures between -10°C and +60°C.*

## OUTSTANDING DESIGN

- Solvent resistant epoxy-polyester powder coated stainless steel outer body
- Easy to clean stainless steel chamber
- Perfectly insulated triple glass window and stainless steel frame for ES 120 and ES 252
- Convenient observation of samples through large window and interior lighting for ES 120 and ES 252
- Antifogging inner glass to avoid condensation and outer glass blocking UV light for ES 120 and ES 252
- Internal glass door for ES 600
- Prevention of air leakage from the chamber and ambient ingress with magnetic gasket
- Interior lighting for easy observation of the samples
- 25 mm access port as standard

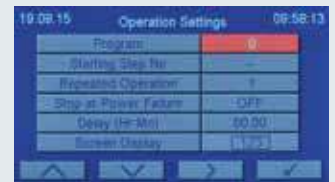
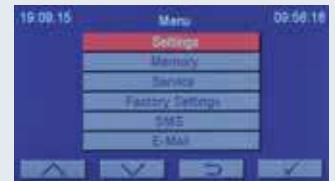
## EFFECTIVE INSULATION AND COOLING

- Protection against ambient air temperature fluctuations with high density injected polyurethane insulation material
- Excellent temperature uniformity and stability with powerful air circulation system even at the low temperatures
- Automatic defrost system to prevent the frost on cooling coils for efficient refrigeration
- Proportional cooling and PID heating system



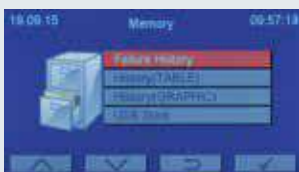
## RELIABLE AND POWERFUL CONTROL SYSTEM : N-Smart™

- ES series Cooled Incubators are powered by N-SmArt™ instrument management system which is based on microprocessor technology and it is designed to simplify operation and guarantee the safety of stored samples
- Maximum information - with highly visible 4,3" colourful LCD display
- Versatile & easy use – Four context-sensitive function keys
- Secured run parameters and data - Password protected menu
- 5 Language options: Turkish, English, French, Russian, Spanish
- Optional language selection – Possibility of editing the text into any language using the Latin alphabet as option
- Immediate understanding - Icons make the operations easier
- Full traceability - Operating parameters tracked digitally or graphically against time
- Alarms clearly displayed - Red colour warns the user in case of any alarm condition
- Fault analysis speeds recovery - Detailed description of the failure with HELP menu
- Longer life, lower energy use - Screen saver decreases the brightness of the display
- Massive data storage - Internal memory stores the records up to ten years with one hour intervals, digitally and graphically
- Failure analysis support – Service staff can recall stored failure history
- More efficient servicing – Password protected service section for software updates, calibration and technical parameter setting



18.09.15 19.09.2015 -1- 09:58:43

Time	Temperature	Time	Temperature
00:00	0.1	01:00	0.1
02:00	0.0	03:00	0.1
04:00	0.1	05:00	0.1
06:00	0.0	07:00	0.0



18.09.15 Failure History: 1 09:57:48

Failure Name	Date	Time
Err5	18.09.2015	18:05:41
Err5	18.09.2015	17:57:35
Err5	18.09.2015	17:23:41
Err5	18.09.2015	17:23:38
Err5	18.09.2015	17:23:35



## FULL TRACEABILITY AND SAFETY WITH OPTIONAL NuveCom™ COMMUNICATION UNIT

- Data always available - Communication unit for traceability and remote access
- Secure data backup – Save parameters on memory stick connected to USB port
- Selectable data recording frequency - Set the recording intervals as 10 or 30 seconds, 1, 5, 30 or 60 minutes to store in a memory stick
- World-wide access - Ethernet port for internet connection
- Local area networking - Remote access via ethernet connection
- Get rapid support – Can send e-mails with the details of any failure
- Remote access and control – NüveCloser™ software to access N-Smart™. Get all the information remotely and control or program your NÜVE product wherever you are.
- Fast corrective action - AlerText™ GSM alarm module can send the details of any alarm condition to up to 5 mobile phone numbers, including emergency service backup 7/24.



## TECHNICAL SPECIFICATIONS

	ES 120	ES 252	ES 600
Chamber Volume, litres	120	252	600
Control System	Programmable Microprocessor N-Smart™ Control System		
Display	4,3" Colourful LCD Display		
Temperature Range	-10°C to +60°C		
Temperature Set and Display Sensitivity	0,1°C		
Temperature Homogeneity @ 4°C and 22°C	±0,5°C		±1°C
Programmable Alarm Limits	±1°C / 10°C		
Number of Program Memory	20		
Programmable Number of Steps	20		
Number of Program Repetition	1-99		
Timer	1 min. – 100 Hours + Hold Position		
Delayed Start Timer	1 min. – 100 Hours		
Alarm	Audible and Visual		
Insulation	High Density Injected Polyurethane		
Internal Material	Stainless Steel		
External Material	Epoxy-Polyester Powder Coated Stainless Steel		
Number of Shelves (Standard/Max.), pcs.	2/10	3/20	3/20
Power Supply	230 V , 50/60 Hz.		
Power Consumption	800 W	1250 W	2000 W
Internal Dimensions (WxDxH) mm	480x545x465	475x545x1110	730x640x1350
External Dimensions (WxDxH) mm	655x745x1020	655x745x1855	925x850x1965
Packing Dimensions (WxDxH) mm	770x890x1190	700x860x2040	1030x1020x2140
Net / Packed Weight kg.	89 / 117	150 / 175	245 / 270

### OPTIONS

- A 08 190 NuveCom™ Communication Unit  
 USB port to store temperature records on memory stick  
 World-wide access via ethernet port with NuveCloser™  
 Rapid support by sending e-mails with details of failure  
 RS 232 port for PC or AlerText™
- A 08 191 AlerText™ GSM alarm module (should be ordered with A 08 190)
- A 08 195 NuveCloser™ Software CD with 3 m. RS 232 cable (should be ordered with A 08 190)

### ACCESSORIES

- R 01 130 Shelf for ES 120/252
- K 23 040 Shelf carrier for ES 120/252
- R 01 165 Shelf for ES 600
- K 23 064 Shelf carrier for ES 600

Note: 2 pcs. shelf carrier should be ordered for each shelf



**NUVE SANAYİ MALZEMELERİ İMALAT VE TİCARET A.Ş.**

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ISO 9001: 2008  
 ISO 13485: 2003