# IN Технические характеристики

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### **Portable Incubators**

### **Cultura Incubator**

Simple, portable incubator for small-scale or infrequent laboratory use. Double skinned, ABS casing with transparent styrolux door. Can be used horizontally or vertically for incubating dipslides, petri dishes, sample tubes, flasks or bottles.

Capacity litres	3.96
Range °C	25 to 45
Accuracy ±°C	1
Overall internal (external) W x D x H mm	220 x 150 x 120 (310 x 168 x 155)
Weight kg	1.1
Power rating W	26
Shelves supplied	1 (for horizontal use)

As described. With adjustable thermostatic control, spirit-filled thermometer range +10 to +60°C and shelf. For 230V 50Hz single phase supplies.

IN060-10 Cultura

### Portable Incubator, Challenger MX25

Versatile, robust, rectangular portable incubator for small scale incubation of samples in the field or where use of a standard incubator is impractical. Temperature range ambient +5°C to +45°C, variation  $\pm 5$ °C (at 20°C ambient). Capacity 5.2 litres. An overtemperature cut-out engages at +70°C. Solid-state heating and control electronics are sealed in the case and a heat reservoir chassis ensures even heat distribution and rapid heat recovery to set temperature. With moulded co-polymer case, transparent polycarbonate lid and spirit thermometer. With a separate, external, universal power supply for increased safety and operation on 100-240V a.c. supplies. An accessory cigar lighter plug and cable allows alternative 12V d.c operation in the field. Usable internal dimensions 180 x 150 x 180mm W x D x H, overall 320 x 260 x 270mm W x D x H. Weight 1.9kg.

IN085-75 Challenger MX25

IN085-77 Cigar lighter plug cable for IN085-75

Dipslides - see HT802/HT808.

### Portable Incubator, Ranger MX45

Versatile, robust, portable incubator for small-scale incubation of samples in the field, or where use of a standard incubator is impractical. Temperature range ambient +5°C to +45°C with quickset reference points at +30°C and +37°C, variation  $\pm 0.5$ °C (at 20°C ambient). Capacity 5.5 litres. An overall temperature cut-out engages at +70°C. Solid state heating and control electronics are sealed in the case and a heat reservoir chassis ensures even heat distribution and rapid heat recovery to set temperature. Rugged aluminium housing with moulded copolymer liner, transparent inner lid and spirit thermometer. With external, universal power supply for increased safety and operation on 100-240V supplies and cigar lighter plug and cable which allows alternative 12V d.c. operation in the field. Usable internal dimensions 300 x 140 x 125mm W x D x H, overall 350 x 280 x 200mm W x D x H. Weight 3.6kg.

IN085-94 Ranger MX45

### Personal Shaking Incubators, PHMT-series, Grant-bio

Compact, versatile, shaking incubators for microcentrifuge tubes using fitted blocks. With twin-line, dot matrix LCD display and keypad setting of shaking speed, temperature and time with constant display of both set and actual values. A low voltage power supply enables safe cold room operation.

Ranges x resolution temperatu shaking speed	ire °C I rpm time	ambient +5 to +100 x 0.1 250 to 1400 x 10 1 minute to 96 hours x 1 minute with alarm and switch off at end of timed period
Shaking orbit	mm	2
Stability and uniformity	±°C	0.1
Overall W x D x H	mm	205 x 230 x 130
Operating temperature range	°C	+4 to +45
Power supply		12V d.c. adapter requiring a 220-240V 50/60Hz supply

As described. Supplied with power adapter and fitted single blocks to hold microcentrifuge tubes as indicated.

IN104-20 20 x 0.5ml/12 x 1.5ml IN104-30 24 x 1.5/2.0ml

Accessory/spare blocks are available - details on request.



IN060-10 in use



IN085-75 in use



IN085-94



IN104 in use with blocks

### **INC Range**



- Wide bodied profile with controls to the side
- Fluctuation ±0.25°C at 37°C
- Natural convection (except 200 litre size)
- Choice of:
  - Aluminium coated mild steel or stainless steel interiors
  - Solid or dual (steel outer, transparent inner) doors

Catalogue		IN420 IN422	-03 -07 -03 -07	-09 -14 -09 -14	-19 -24 -19 -24	 -44  -44	 -64*  -64*
Usable vo	lume	litres	50	75	100	150	200
External	H W D	mm mm mm	580 730 480	580 850 480	580 850 590	690 850 670	890 850 670
Internal	H W D	mm mm mm	420 360 350	420 530 350	420 530 460	550 490 540	750 490 540
Power rat	ting	W	750	750	750	750	1000
Shelves su	ıpplie	d	2	2	3	3	4
Shelf posi	itions		3	3	4	5	7
Weight		kg	31	39	48	66	85

<sup>\*</sup>Fan assisted models.

- Touchscreen digital control incorporating an integral overheat system with two Pt100 sensors
- ◆ Top vent with clip for thermometer
- Fitted with fixed shelf runners and removable chrome-plated wire grid shelves
- Steel outer case with stoved powder paint finish

### Incubators, wide bodied profile, INC

#### 70°C Maximum, solid door

As described. With aluminium coated steel (CLAD) or stainless steel interior as indicated, shelves, control and safety thermostats, mains on/off switch and indicator lamps. For 220-240V 50Hz single phase supplies.

IN420-03 50 litres, CLAD
 IN420-07 50 litres, stainless steel
 IN420-14 75 litres, CLAD
 IN420-14 100 litres, CLAD
 IN420-24 100 litres, stainless steel
 IN420-44 150 litres, stainless steel
 IN420-64 200 litres, stainless steel, fan

### 70°C Maximum, dual door

As IN420 series but with additional transparent inner door. For 220-240V 50Hz single phase supplies.

 IN422-03
 50 litres, CLAD

 IN422-07
 50 litres, stainless steel

 IN422-09
 75 litres, CLAD

 IN422-14
 75 litres, stainless steel

 IN422-19
 100 litres, CLAD

 IN422-24
 100 litres, stainless steel

 IN422-44
 150 litres, stainless steel

 IN422-64
 200 litres, stainless steel, fan



IN420, IN422 is similar

### Mini Range



- Standard profile with controls at base
- Choice of:
  - Aluminium coated mild steel or stainless steel interiors
  - Solid metal, with or without a large, inset viewing window, or dual (steel outer, transparent inner) doors
- Hydraulic thermostat control and separate adjustable safety thermostat, both with locking devices and indicator lamps
- Natural convection (up to 75 litre size)
- ♦ Fluctuation ±0.25°C at 37°C
- ◆ Top vent with clip for thermometer
- Fitted with fixed shelf runners and removable chrome-plated wire grid shelves
- Steel outer case with stoved powder paint finish

Catalogue No.	IN425 IN427	-10 -10 —	-20 -20 —	-30/-35 -30 -30/-35	-45 -40 -40/-45	-55 -50 -55	
Usable volume	litres	6	18	30	50	75	
External H W D	mm mm mm	390 320 330	520 380 410	500 480 490	590 610 470	590 610 600	
Internal H W D	mm mm mm	150 230 190	260 260 270	240 360 350	330 490 330	330 490 450	
Power rating	W	150	250	500	500	750	
Shelves supplied		1	2	2	2	2	
Shelf positions		1	2	2	3	3	
Weight	kg	7	14	20	26	34	

### Incubators, standard profile, MINI

### 70°C Maximum, solid door

As described. With aluminium coated steel (CLAD) or stainless steel interior as indicated, shelves, control and safety thermostats, mains on/off switch and indicator lamps. For 220-240V 50Hz single phase supplies.

pridac adpp	iics.
IN425-10	6 litres, CLAD
IN425-20	18 litres, CLAD
IN425-30	30 litres, CLAD

IN425-35 30 litres, stainless steel
IN425-45 50 litres, stainless steel
IN425-55 75 litres, stainless steel

### 70°C Maximum, transparent window door

As IN425-series but with metal door with a large, inset viewing window. For 220-240V 50Hz single phase supplies.

IN427-10	6 litres, CLAD
IN427-20	18 litres, CLAD
IN427-30	30 litres, CLAD
IN427-40	50 litres, CLAD
IN427-50	75 litres, CLAD

### 70°C Maximum, dual door

As IN425-series but with additional transparent inner door. For 220-240V 50Hz single phase supplies.

IN429-30	30 litres, CLAD
IN429-35	30 litres, stainless steel
IN429-40	50 litres, CLAD
IN429-45	50 litres, stainless steel
IN429-55	75 litres, stainless steel







IN427

### Incubators IN/IF Series

# memmerH

- Stainless steel interior and exterior sides (external rear panel-zinc coated steel)
- ◆ Temperature range ambient +5°C (IN-series) or +10°C (IF-series) to +80°C
- Choice of natural (IN-series) or forced air, fan (IF-series) convection models
- With choice of SingleDISPLAY or TwinDISPLAY (plus-series) colour TFT, multi-touchscreen controlCOCKPIT controller

### - SingleDISPLAY controlCOCKPIT

Display of temperature (°C or °F), fan speed (IF-models only) and programme time. Includes one Pt100 DIN Class A temperature sensor in a 4 wire circuit and ethernet interface. Dual overtemperature protection with freely adjustable monitoring of temperature and mechanical temperature limiter (TB Class 1) to DIN 12 880. With AtmoCONTROL logging software for online monitoring of up to 32 connected appliances, optical alarms when set alarm limits are exceeded and automatic alarm email notifications.

- Heaters located in ribs on all four sides provide uniform heating
- Digital process timer, adjustable between 1 minute and 99 days, 23 hours
- 10 year datalogger
- ◆ Setting accuracy: ±0.1°C
- Supplied with 1 or 2 stainless steel wire grid shelves
- Inner glass door

### - TwinDISPLAY controlCOCKPIT

Display of temperature (°C or °F), fan speed (IF-models only) and programme time. Includes two Pt100 DIN Class A temperature sensors in a 4 wire circuit, ethernet and USB interfaces and heatBALANCE function for adjustment of heating power distribution of the upper and lower heating groups in an adjustment range between -50% and +50%. Multiple overtemperature protection monitoring TWW/TWB (protection Class 3.1/3.2, respectively) and mechanical temperature limiter (TB Class 1) to DIN 12 880, with settings for individual maximum/minimum values for over/undertemperature alarms. Also includes AUTOSAFETY function which allows automatic adjustment to the set value within a freely adjustable tolerance range. With AtmoCONTROL logging software as SingleDISPLAY controller, but additionally includes display of the programme sequence created by the user, repeat functions which can be inserted anywhere within the control sequence and creation of repeating weekly programmes which can be transferred via ethernet or USB interfaces provided.





### **IN/IF Series Incubators, Memmert**

Model Natural conve Forced conve Natural conve Forced conve	ection	IN30 IF30 IN30plus IF30plus	IN55 IF55 IN55plus IF55plus	IN75 IF75 IN75plus IF75plus	IN110 IF110 IN110plus IF110plus	IN160 IF160 IN160plus IF160plus	IN260 IF260 IN260plus IF260plus	IN450* IF450* IN450plus* IF450plus*	IN750* IF750* IN750plus* IF750plus*
Volume	litres	32	53	74	108	161	256	449	749
Internal (external) H W D	mm mm mm	320 (707) 400 (585) 250 (434)	400 (787) 400 (585) 330 (514)	560 (947) 400 (585) 330 (514)	480 (867) 560 (745) 400 (584)	720 (1107) 560 (745) 400 (584)	800 (1186) 640 (824) 500 (684)	720 (1247) 1040 (1224) 600 (784)	1200 (1726) 1040 (1224) 600 (784)
Shelves supplied		1	1	2	2	2	2	2	2
Max. no. of shelves held		3	4	6	5	8	9	8	14
Max. loading per shelf grid	kg	30	30	30	30	30	30	30	30
Max. loading of chamber	kg	60	80	120	175	210	300	300	300
Power loading	kW	0.8	1.0	1.25	1.4	1.6	1.7	1.8	2.0
Power supply		230V 50/60Hz	single phase –	– all models					
Net weight	kg	44	55	64	72	80	96	160	192

<sup>\*</sup>Double door models, mounted on lockable castors.

continued on next page

### Incubators IN/IF Series continued

# memmerH

As described. With choice of SingleDISPLAY or TwinDISPLAY controller, integral process timer adjustable from 1 minute to 99 days, 23 hours, dual or multiple overload protection (-plus models only), temperature and time TFT display, chamber ventilation slide adjustment and stainless steel grid shelves. For 230V 50/60Hz single phase supplies.

### **IN Natural convection, SingleDISPLAY Controller Models**

IN472-10 IN472-12 IN472-14	IN30, 32 litres IN55, 53 litres IN75, 74 litres
IN472-16	IN110, 108 litres
IN472-18	IN160, 161 litres
IN472-20	IN260, 256 litres
IN472-22	IN450, 449 litres
IN472-24	IN750, 749 litres

### IF Forced Air convection, SingleDISPLAY Controller Models

IF30, 32 litres
IF55, 53 litres
IF75, 74 litres
IF110, 108 litres
IF160, 161 litres
IF260, 256 litres
IF450, 449 litres
IF750, 749 litres

### **INplus Natural convection, TwinDISPLAY Controller Models**

IN4/2-50	IN30plus, 32 litres
IN472-52	IN55plus, 53 litres
IN472-54	IN75plus, 74 litres
IN472-56	IN110plus, 108 litres
IN472-58	IN160plus, 161 litres
IN472-58 IN472-60	IN160plus, 161 litres IN260plus, 256 litres
IN472-60	IN260plus, 256 litres

### **IFplus Forced Air convection, TwinDISPLAY Controller Models**

IN472-66	IF30plus, 32 litres
IN472-68	IF55plus, 53 litres
IN472-70	IF75plus, 74 litres
IN472-72	IF110plus, 108 litres
IN472-74	IF160plus, 161 litres
IN472-76	IF260plus, 256 litres
IN472-78	IF450plus, 449 litres
IN472-80	IF750plus, 749 litres

### **Accessory Shelves**

Stainless steel wire grid.

IN473-04	For 32 litre incubator
IN473-06	For 53 and 74 litre incubators
IN473-08	For 108 and 161 litre incubators
IN473-10	For 256 litre incubator
IN473-12	For 449 and 749 litre incubators



# memmer Cooled Incubators

### **Cooled Incubators, ICP-series**

- Temperature range ambient -12°C to +60°C (except IN510-12 which is ambient -5°C to +60°C), temperature accuracy: ±0.1°C
- Stainless steel interior and exterior (external rear-panel zinc-plated steel)
- Fan circulation and compressor-driven cooling
- With TwinDISPLAY controlCOCKPIT: displaying temperature (°C or °F), fan speed and programme time. Includes two Pt100 DIN Class A temperature sensors and heatBALANCE function to adjust heating power distribution. Multiple overtemperature protection monitoring and mechanical temperature limiter (TB Class 1) to DIN 12 880, with alarm settings. Also includes AUTOSAFETY function allowing automatic adjustment to the set value within a freely adjustable tolerance range. AtmoCONTROL logging software offers online monitoring of up to 32 connected appliances, optical alarms and automatic alarm email notifications. Also includes programme sequence display and repeat functions which can be transferred via ethernet or USB interfaces provided
- 10 year datalogger ◆ R134a refrigerant
- Inner glass door

Model		ICP55	ICP110	ICP260	ICP450*
Capacity	litres	53	108	256	449
Internal H (External) W D	mm mm mm	400 (1153) 400 (585) 330 (514)	480 (1233) 560 (745) 400 (584)	800 (1552) 640 (824) 500 (684)	720 (1613) 1040 (1224) 600 (784)
Shelves supplied		1	1	2	2
Max. shelf positi	ons	4	5	9	8
Power rating	kW	0.5	0.5	0.7	0.75
Net weight	kg	89	113	157	217

<sup>\*</sup>Double door model, mounted on lockable castors.

As described. With compressor-driven cooling, TwinDISPLAY controller, integral process timer adjustable from 1 minute to 99 days, 23 hours, multiple overload protection, twin TFT display of temperature, time, fan speed and exhaust air flap position, chamber ventilation slide adjustment and stainless steel grid shelves. For 230V 50/60Hz single phase supplies.

IN510-12 IN510-22 ICP55, 53 litres ICP260, 256 litres IN510-17 ICP110, 108 litres IN510-27 ICP450, 449 litres

### **Accessory shelves for all Cooled incubators**

Stainless steel wire grid.

For 53 litre incubator IN473-06 IN473-10 For 256 litre incubator IN473-08 For 108 litre incubator IN473-12 For 449 litre incubator

### **Cooled Incubators, IPP-series**

- Temperature range 0°C to +70°C (within ambient +16°C to +40°C), temperature accuracy:  $\pm 0.1^{\circ}C$
- Stainless steel interior and exterior (external rear-panel zinc-plated steel)
- Fan circulation and Peltier technology cooling
- Choice of controller:
- SingleDISPLAY controlCOCKPIT: displaying temperature (°C or °F), fan speed and programme time. Includes one Pt100 DIN Class A temperature sensor in a 4 wire circuit and ethernet interface. Dual overtemperature protection with freely adjustable monitoring of temperature and mechanical temperature limiter (TB Class 1) to DIN 12 880. With AtmoCONTROL logging software for online monitoring of up to 32 connected appliances, optical alarms when set alarm limits are exceeded and automatic alarm email notifications.
- TwinDISPLAY controlCOCKPIT: as SingleDISPLAY controlCOCKPIT but with two independent displays, two Pt100 DIN Class A temperature sensors, heatBALANCE function to adjust heating power distribution and multiple overtemperature protection monitoring. Also includes AUTOSAFETY function allowing automatic adjustment to the set value within a freely adjustable tolerance range and programme sequence display and repeat functions which can be transferred via ethernet or USB interfaces.
- 10 year datalogger Almost silent Inner glass door

Model, SingleDISPLAY TwinDISPLAY			IPP30 IPP30Plus	IPP55 IPP55Plus	IPP110 IPP110Plus	IPP260 IPP260Plus
Capacity litres		32	53	108	256	
Internal (External)	H W D	mm mm mm	320 (707) 400 (585) 250 (524)	400 (787) 400 (585) 330 (604)	480 (867) 560 (745) 400 (674)	800 (1186) 640 (824) 500 (774)
Shelves supp	olied		1	1	2	2
Max. shelf p	ositi	ons	3	4	5	9
Power ratin	g	kW	0.16	0.28	0.65	0.82
Net weight kg			40	52	78	114

As described. With Peltier module cooling, controller, integral process timer adjustable from 1 minute to 99 days, 23 hours, multiple overload protection, twin TFT display(s) of temperature, time, fan speed and exhaust air flap position, chamber ventilation slide adjustment and stainless steel grid shelves. For 230V 50/60Hz single phase supplies.

TwinDISPLAY controller

### SingleDISPLAY controller

IN525-08	IPP30, 32 litres	IN527-08	IPP30plus, 32 litres
IN525-12	IPP55, 53 litres	IN527-12	IPP55plus, 53 litres
IN525-17	IPP110, 108 litres	IN527-17	IPP110plus, 108 litres
IN525.22	IPP260 256 litres	IN527-22	IPP260 plus 256 litres





IN510-27 IN527-22

### **Cooled Incubators**

### Lovibond

- ◆ Temperature range: +2 to +40°C x 0.1°C
- Temperature fluctuation ±1°C (stirred 500ml water at centre of cabinet). For  $\dot{B}OD$  (T = 20°C)  $\pm 0.5$ °C
- R134a refrigerant
- Backlit LED temperature display
- Fan-assisted cooling
- Choice of glass-panelled or solid door models
- Built-in internal sockets (Europlug, Schuko-type) for operating instruments inside the cabinet

		oor, TC- oor, TC-	135S —	 140G	175S —	255S —	 256G	445S —
Capacity		litres	135	140	175	255	255	445
Internal (external)	H W D	mm mm mm	700 (850) 430 (600) 515 (600)	700 (885) 443 (600) 515 (600)	1045 (1216) 415 (600) 515 (600)	1450 (1590) 415 (600) 515 (600)	1450 (1590) 415 (600) 515 (600)	1300 (1516) 515 (710) 652 (752)
Shelves supplied			3	3	3	4	4	5
Internal sockets su	pplied		4	4	5	7	7	9
Net weight		kg	39	50	49	64.5	82	79.5

As described. With digital controller and backlit LED display, solid or glasspaned door and shelves and sockets as indicated. For 230V 50Hz single phase

**Solid door models** 

**Glass door models** 

**IN686-12** TC135S IN686-22 TC175S

IN686-32 TC255S IN686-42 TC445S

IN686-62 TC140G IN686-82 TC256G



IN686-62 to -82 in use with WR245-10

# Automatic CO<sub>2</sub>/Humidity Incubators memmer -

- Adjustable humidity control from 80 to 93% R.H., accuracy ±0.5% R.H.
- Adjustable temperature control: ambient + 5°C to +50°C
- Digital CO₂ control from 0 to 20% CO₂
- Stainless steel interior and exterior
- TwinDISPLAY controlCOCKPIT multifunctional digital PID controller with two high-definition TFT colour displays, timer and fault indicators, ethernet LAN and USB output interfaces
- Sterilisation programme: 60 minutes at 180°C
- Classified as a Class IIa medical device for IVF work

Model		ICO105med	ICO240med
Capacity	litres	107	241
Temperature range	°C	Ambient +5 to +50 -	- both models
CO₂ rangelaccuracy	%	0 to 20/ ±0.1 — both	models
Internal H	mm	480 (719)	810 (1180)
(external) W	mm	560 (719)	600 (759)
D	mm	400 (591)	500 (691)
Shelves supplied		2	2
Max. no. of shelves held		6	12
Power loading kw		1.0	2.0
Net weight	kg	70	110

As described. Supplied with stainless steel water dish and shelves as indicated. For 230V 50/60Hz a.c. single phase supplies. Requires a pressure reducing valve IN675-75 for operation and locally-sourced  $CO_2$  cylinders.

**IN675-28** Model ICO105med **IN675-48** Model ICO240med

### Accessories

IN675-63 Stainless steel shelf for IN670-28 only Stainless steel shelf for IN670-48 only

IN675-75 Pressure reducing valve for CO<sub>2</sub> gas cylinder, with monitor

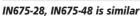
# CO<sub>2</sub> Cylinder Exhanger, Pneuchange Mark 2

Bench, or wall-mounting. Ensures continuity of gas supply to CO<sub>2</sub> incubators by automatically switching supply between two cylinders as one becomes exhausted. Totally pneumatic operation, no electrical supply is required, however a battery-powered alarm indicates when cylinder change-over occurs. Otherwise coloured indicators show which cylinder is active. Pressure gauges indicate both separate inlet pressures and outlet pressure. Inlet pressure range 30 to 100 psi, outlet pressure 0 to 30psi. The exhausted cylinder can be disconnected and exchanged without disruption to the gas supply. Suitable for use with all non-corrosive, non-flammable gases. Standard outlet fittings are <sup>3</sup>/<sub>8</sub>" male BSP. Supplied as unit only, or in a kit with 2 x CO<sub>2</sub> cylinder regulators, cylinder wall support rack, <sup>1</sup>/<sub>4</sub>" i.d. reinforced PVC tubing (10 metres), tubing adapters, clips and spanner to provide a complete kit for connecting CO<sub>2</sub> incubators to two cylinders.

IN715-20 Pneuchange unit only, 0 to 30psi IN715-40 Pneuchange kit, 0 to 30psi

CO<sub>2</sub> cylinders - local supply recommended.







IN715-20

### Shaking Incubators, ES-20 and ES-80

### **Grant bio**

- ◆ Temperature range:
  - ES-20 incubator: +25°C to 42°C x 0.1°C
     ES-80 incubator: +25°C to 80°C x 0.1°C
- ◆ Temperature stability ±0.5°C
- Orbital shaking speed of 50 to 250rpm with 10mm (IN730-10) or 20mm orbit (IN730-20)
- Interchangeable platforms

•	Digital setting of temperature and shaking
	speed with LCD readouts and built-in timer for
	shaking from 1 minute to 96 hour

- Microprocessor controlled heating with forced air circulation
- Robust construction with high visibility, Plexiglass side panels (IN730-10 only)

Model		ES-20	ES-80
Capacity	litres	19.5	53
Internal W x D x H	mm	300 x 260 x 250	390 x 450 x 300
External W x D x H	mm	340 x 340 x 435	590 x 525 x 510
Maximum vessel height	mm	156	220
Number of conical flasks held x capacity, ml		12 x 250 to 150, 6 x 250 to 300	30 x 100 to 150, 16 x 250 to 300, 9 x 500, 6 x 1000
Maximum loading capacity	kg	2.5	8
Weight, net	kg	15	43
Power rating	W	150	450

### Incubators, Grant-bio ES-20 and ES-80

As described. Comprising direct drive orbital shaker, 7mm thick plexiglass side and door windows (IN730-10), or stainless steel chamber (IN730-20), and digital display of temperature, time and shaking speed. For 230V 50/60Hz single phase supplies. Require accessory platforms for operation.

IN730-10 Shaking Incubator, Grant-bio ES-20 IN730-20 Shaking Incubator, Grant-bio ES-80

#### Accessory platforms

Accessory	platforms		
IN732-12	P12-100 platform with clamps for 12 x 100 to 150ml flasks/beakers. For use	IN732-22	PP-400 platform with non-slip rubber mat. For use with IN730-20 only
IN732-14	with IN730-10 only PP-4 platform with non-slip rubber mat. For use with IN730-10 only	IN732-24	P30-100 platform with clamps for 30 x 100 to 150ml flasks/beakers. For use with IN730-20 only
IN732-16	P6-250 platform with clamps for 6 x 250 to 300ml flasks/beakers. For use with IN730-10 only	IN732-26	P16-250 platform with clamps for 16 x 250 to 300ml flasks/beakers. For use with IN730-20 only
IN732-18	PUP-12 universal platform with adjustable bars. For use with IN730-10 only	IN732-28	P9-500 platform with clamps for 9 x 500ml flasks/beakers. For use with IN730-20 only
IN732-20	P16-88 platform for up to 88 x 30mm diameter tubes. For use with IN730-10 only	IN732-30	P6-1000 platform with clamps for 6 x 1000ml flasks/beakers. For use with IN730-20 only

# Total Visibility Incubators, 60°C

### **Pstuart**

- ◆ Temperature range ambient +5°C to 60°C
- Push button pre-set for 37°C operation
- Constructed in clear acrylic material
- Hinged front and top panels for easy access
- Side panels have two plugged service ports
- Side mounted controls, heater and fan
- Temperature fluctuation better than ±0.1°C
- Safety cut-out, pre-set at 72°C
- Can be positioned over existing apparatus

Capacity	litres	60
Internal H x W x D	mm	380 x 450 x 380
External H x W x D	mm	390 x 600 x 390
Temperature fluctuation	°C	±0.1 at 37
No. of shelves*		3
Interval between shelves*	mm	90
Power rating	W	250

<sup>\*</sup> With accessory shelf rack system fitted.

### **Incubators, Stuart SI60**

As described. Capacity 60 litres. Maximum temperature 60°C. With hinged front and top panels, temperature control system with preset at 37°C, safety temperature cut-out, air circulating fan and holes for gas or cable introduction. Supplied flat packed for assembly by the user. For 220-240V 50Hz single phase supplies. Without base plate or shelf rack system.

IN800-10 SI60, 60 litres, dial control SI60D, 60 litres, digital set and read control

### Accessories

**IN802-08** Base plate

**IN802-13** Shelf rack system, plastic coated wire



IN730-10 in use with IN732-18



IN730-20 in use with IN732-28



IN800 in use with accessories

### Shaking Incubators SI500 and SI600-series

# **estuart**

- ◆ Temperature range ambient +5°C to 60°C ±0.5°C (except IN807-61 which has a range of +5°C to 60°C using accessory refrigerated circulator)
- Orbital shaking speed 30 to 300rpm, with 16mm orbit
- Digital setting of temperature and shaking speed with separate LED readouts and built in timer for shaking from 1 second to 9 days
- Outer surfaces treated with Biocote antimicrobial protection
- USB communication port with software for monitoring of temperature by the user's PC
- Retractable platform can be locked in position during use or slid out of the chamber for easy loading or unloading
- Accessory tube racks available with angle adjustment up to 30° and 'Magnalock' clamping system for attachment to the platform
- Cooled version available

Model		SI500	SI600	SI600C
Capacity	litres	51	115	115
Internal W x D x H	mm	422 x 408 x 297	625 x 455 x 395	625 x 465 x 380
External W x D x H	mm	450 x 474 x 522	675 x 542 x 640	675 x 542 x 640
Maximum vessel height	mm	250	320	320
Number of conical flasks held x capacity	ml	9 x 500, 4 x 1000	15 x 500, 9 x 1000, 6 x 2000, 2 x 2800	15 x 500, 9 x 1000, 6 x 2000, 2 x 2800
Weight, net	kg	30	53	60
Power rating	W	300	500	500

### Incubators, Stuart SI500 and SI600

As described. Comprising orbital shaker with soft start, electronic feedback speed control, smoked acrylic side and door windows with metal frame, separate top-mounted incubator unit with digital display, safety thermostat, forced air circulation and fitted with safety door switch which halts the shaker when the door is opened. For 230V 50Hz single phase supplies.

IN805-60 SI500, Orbital shaker incubator IN805-61 SI600, Orbital shaker incubator

### **Cooled Incubator, Stuart SI600C**

As IN805-series but with built-in cooling coil enabling a temperature range of  $+5^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  using an accessory refrigerated circulator bath. For 230V 50Hz single phase supplies.

IN807-61 SI600C, Orbital shaker incubator

### **Accessory tube racks**

Up to six racks can be accommodated on the shaking platorm (except IN805-60 which accepts up to four), and are locked in using the 'Magnalock' system which does not require tools. For tubes as indicated.

IN805-62
IN805-64
IN805-66
IN805-66
IN805-68
IN8

### Refrigerated Circulator bath, Stuart

For use with IN807-61 only. For 230V 50Hz single phase supplies.

CL140-15 SRC4

Microplate incubators – see Microtitration Section.



IN807-61 in use, IN805 are similar

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