VWR®
We Enable Science

# VWR® FOR OVENS AND INCUBATORS

- Drying ovens
- Microbiological incubators
- Cooled incubators
- Shaking incubators
- Compact incubators and dip slides
- Temperature measurement



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VWR COLLECTION

designed for **reliability**

# OVENS AND INCUBATORS

We hope that you will notice several things about the VWR range of ovens and incubators.

**Choice –** enough to cover almost every application packed into a series of models without being overwhelming

**Performance –** market leading consistency and reliability backed up with warranties that run for many years

**Value for money –** well built products that last and don't cost a fortune to buy






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# Ovens with natural convection, DRY-Line® Prime

These ovens, with natural convection, feature an acid-proof stainless steel inner chamber and a powder coated sheet exterior. All models have a 30 mm Ø access port, real time clock, digital timer, USB port and test results memory function to recall temperature data or events with an internal memory which stores up to 2046 data records. The range has an auto-diagnostic function, temperature sensor fail alarm, door lock, open door alarm and audible and visual temperature alarms. All models have the following safety features: Independent adjustable over-temperature safety device Class 3.1 protects the samples and the oven and a power failure control system (program continues after power restored). All Prime oven and incubator units of the same size can be stacked without additional accessories (except the 180 l models which are not stackable).




- Microprocessor controller with LCD graphic display and illuminated touch buttons
- Stores up to 3 programs, each program includes max. 3 adjustable ramps and 3 temperature-time profiles
- Loop function up to 99 times or endless
- Adjustable hold at set point time for temperature from 1 min to 5 days or continuous operation
- Manual air flap control, 0% (closed), 25%, 50%, 75%, 100% (open)

Supplied with 2 stainless steel wire shelves for 56 and 112 Prime models and 3 shelves for the 180 Prime model. Manufacturer test certificate (data measured at 105 °C) and Basic Control Software to download data from internal memory. Multilingual instruction manual.

| Model | DL 56 Prime | DL 112 Prime | DL 180 Prime |
|---|---|---|---|
| Temperature range (°C) | +50...300 | | |
| Temperature fluctuation (time) (°C) | ±0,4 at 150 °C | | |
| Temperature variation (spatial) (°C) | ±3,3 at 150 °C | ±3,0 at 150 °C | ±3,5 at 150 °C |
| Capacity (l) | 56 | 112 | 180 |
| Convection type | Natural convection | | |
| Shelves supplied (max.) | 2 (5) | 2 (7) | 3 (9) |
| Max. load per shelf (kg) | 25 | | |
| Max. chamber capacity (kg) | 50 | | 75 |
| Int. W×D×H (mm) | 400×360×390 | 460×450×540 | 470×560×720 |
| Ext. W×D×H (mm) | 590×600×700 | 650×700×850 | 650×760×1030 |
| Nominal power consumption (W) | 1700 | 2500 | 3100 |
| Weight (kg) | 52 | 65 | 86 |

| Description | Pk | Cat. No. |
|---|---|---|
| VWR DRY-Line® 56 Prime | 1 | **466-0448** |
| VWR DRY-Line® 112 Prime | 1 | **466-0449** |
| VWR DRY-Line® 180 Prime | 1 | **466-0450** |

| Description | For | Pk | Cat. No. |
|---|---|---|---|
| **Accessories** | | | |
| Stainless steel wire shelf | DL/VL/IL/ILPR 56 | 1 | **466-0454** |
| Stainless steel wire shelf | DL/VL/IL/ILPR 112 | 1 | **466-0455** |
| Stainless steel wire shelf | DL/VL/IL 180 | 1 | **466-0456** |
| Base on castors | DL/VL/IL 180 | 1 | **466-0457** |

# Drying ovens with forced convection, VENTI-Line® Prime

These ovens with forced air convection feature an acid-proof, stainless steel inner chamber and powder coated sheet exterior. All models have a 30 mm Ø access port, real time clock, digital timer, USB port and test results memory function to recall temperature data or events with an internal memory which stores up to 2046 data records. The range has an auto-diagnostic function, temperature sensor fail alarm, door lock, open door alarm and audible and visual temperature alarms.




- Microprocessor controller with LCD graphic display and illuminated touch buttons
- Stores up to 3 programs, each program includes max. 3 adjustable ramps and 3 temperature-time profiles
- Loop function up to 99 times or endless
- Adjustable start delay feature (from 1 minute to 99:59 hours)
- Fan speed control (10 to 100%) and manual air flap control, 0% (closed), 25%, 50%, 75%, 100% (open)

All models have the following safety features: Independent adjustable over-temperature safety device Class 3.1 protects the samples and the oven, and a power failure control system (program continues after power restored). All Prime oven and incubator units of the same size can be stacked without additional accessories (except the 180 L models which are not stackable).

Supplied with 2 stainless steel wire shelves for 56 and 112 Prime models and 3 shelves for the 180 Prime model. Manufacturer test certificate (data measured at 105 °C) and Basic Control Software to download data from internal memory. Multilingual instruction manual.

| Model | VL 56 Prime | VL 112 Prime | VL 180 Prime |
|---|---|---|---|
| Temperature range (°C) | 50...300 | | |
| Temperature fluctuation (time) (°C) | ±0,2 at 150 °C | | |
| Temperature variation (spatial) (°C) | ±2,0 at 150 °C | ±2,3 at 150 °C | ±2,5 at 150 °C |
| Capacity (l) | 56 | 112 | 180 |
| Convection type | Forced convection | | |
| Shelves supplied (max.) | 2 (5) | 2 (7) | 3 (9) |
| Max. load per shelf (kg) | 25 | | |
| Max. chamber capacity (kg) | 50 | | 75 |
| Int. W×D×H (mm) | 400×360×390 | 460×450×540 | 470×560×720 |
| Ext. W×D×H (mm) | 590×600×700 | 650×700×850 | 650×760×1030 |
| Nominal power consumption (W) | 1700 | 2500 | 3100 |
| Weight (kg) | 53 | 66 | 87 |

| Description | Pk | Cat. No. |
|---|---|---|
| VWR VENTI-Line® 56 Prime | 1 | **466-0451** |
| VWR VENTI-Line® 112 Prime | 1 | **466-0452** |
| VWR VENTI-Line® 180 Prime | 1 | **466-0453** |

| Description | For | Pk | Cat. No. |
|---|---|---|---|
| **Accessories** | | | |
| Stainless steel wire shelf | DL/VL/IL/ILPR 56 | 1 | **466-0454** |
| Stainless steel wire shelf | DL/VL/IL/ILPR 112 | 1 | **466-0455** |
| Stainless steel wire shelf | DL/VL/IL 180 | 1 | **466-0456** |
| Base on castors | DL/VL/IL 180 | 1 | **466-0457** |

# Digital incubators, INCU-Line®, IL 10, IL 23 and IL 56

IL 10, IL 23 and IL 56 digital incubators offer an economical and space saving solution for microbiology or haematology applications. The temperature can be freely adjusted in increments of 0,1 °C up to a maximum of 70 °C. Heating elements are incorporated into the housing base and walls to ensure temperature stability and uniformity. The IL 10 is available with a transparent Plexiglas® window to provide full visibility or a painted, opaque Plexiglas® window to protect photosensitive samples. IL 23 and IL 56 come as standard with a transparent Plexiglas® window. The housing and door frame are constructed entirely of epoxy coated mild steel.




- Compact design (IL 10: 0,08 $m^2$ ; IL 23: 0,12 $m^2$ ; IL 56: 0,19 $m^2$)
- Digital PID control with PT100 sensor and LED display, temperature control can be readjusted with a certified reference temperatre measuring instrument
- Excellent temperature stability (± 0,5 °C at 37 °C)
- Easy to use, safe and reliable

IL 10 is supplied with one perforated stainless steel shelf, IL 23 and and IL 56 are supplied with two. The IL 10 can, optionally, be loaded with up to two specially designed aluminium tube racks for vertical incubation of a maximum of 24 dip slide tubes. All units are supplied with a standard test certificate (measuring point centre of chamber) data is measured at 37 °C.

* Measured with the chamber empty.

| Model | IL 10 | IL 23 | IL 56 |
|---|---|---|---|
| Temperature range (°C) | Ambient +5...70 | | |
| Temperature fluctuation (time) (°C) | ±0,5 at 37 °C * | | |
| Temperature variation (spatial) (°C) | | | |
| Capacity (l) | 10 | 23 | 56 |
| Convection type | Natural convection | | |
| Shelves supplied (max.) | 1 (2) | 2 (3) | 2 (5) |
| Max. load per shelf (kg) | 3 | | 10 |
| Int. W×D×H (mm) | 230×220×200 | 290×290×270 | 390×360×400 |
| Ext. W×D×H (mm) | 285×280×335 | 340×360×400 | 453×420×546 |
| Nominal power consumption (W) | 70 | 160 | 220 |
| Weight (kg) | 8,3 | 12,8 | 23,6 |

| Type | Pk | Cat. No. |
|---|---|---|
| INCU-Line® IL 10 with transparent window | 1 | **390-0384** |
| INCU-Line® IL 10 with painted opaque window | 1 | **390-0385** |
| INCU-Line® IL 23 with transparent window | 1 | **390-0482** |
| INCU-Line® IL 56 with transparent window | 1 | **390-0999** |

| Description | Pk | Cat. No. |
|---|---|---|
| **Accessories** | | |
| Tube rack for dip slides, 2×6 positions, Ø 32 mm | 1 | **390-0386** |
| Extra shelf for IL 10, stainless steel, 226×215 mm | 1 | **390-0387** |
| Extra shelf for IL 23/IL 23R/IL Tower, stainless steel, 286×285 mm | 1 | **390-0483** |

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# Incubators with natural convection, INCU-Line Prime

These incubators with natural air convection feature a stainless steel inner chamber, a powder coated sheet exterior and an internal glass door. All models have a 30 mm Ø access port, real time clock, digital timer, USB port and test results memory function to recall temperature data or events with an internal memory which stores up to 2046 data records. The range has an auto-diagnostic function, temperature sensor fail alarm, door lock, open door alarm and audible and visual temperature alarms. All models have the following safety features: Independent adjustable over-temperature safety device Class 3.1 protects the samples and the incubator and a power failure control system (program continues after power restored). All Prime oven and incubator units of the same size can be stacked without additional accessories (except the 180 L models which are not stackable).




- Microprocessor controller with LCD graphic display and illuminated touch buttons
- Stores up to 3 programs, each program includes max. 3 adjustable ramps and 3 temperature-time profiles
- Loop function up to 99 times or endless
- Adjustable hold at set point time for temperature from 1 min to 5 days or continuous operation
- Manual air flap control, 0% (closed), 25%, 50%, 75%, 100% (open)

Supplied with 2 stainless steel wire shelves for 56 and 112 Prime models and 3 shelves for the 180 Prime model. Manufacturer test certificate (data measured at 37 °C) and Basic Control Software to download data from internal memory. Multilingual instruction manual.

| Model | IL 56 Prime | IL 112 Prime | IL 180 Prime |
|---|---|---|---|
| Temperature range (°C) | Ambient +5...100 | | |
| Temperature fluctuation (time) (°C) | ±0,2 at 37 °C | | |
| Temperature variation (spatial) (°C) | ±0,7 at 37 °C | ±0,6 at 37 °C | ±0,8 at 37 °C |
| Capacity (l) | 56 | 112 | 180 |
| Convection type | Natural convection | | |
| Shelves supplied (max.) | 2 (5) | 2 (7) | 3 (9) |
| Max. load per shelf (kg) | 25 | | |
| Max. chamber capacity (kg) | 50 kg | | 75 kg |
| Int. W×D×H (mm) | 400×360×390 | 460×450×540 | 470×560×720 |
| Ext. W×D×H (mm) | 590×600×700 | 650×700×850 | 650×760×1030 |
| Nominal power consumption (W) | 450 | | 850 |
| Weight (kg) | 54 | 67 | 88 |

| Type | Pk | Cat. No. |
|---|---|---|
| INCU-Line® IL 56 Prime incubator | 1 | **390-0909** |
| INCU-Line® IL 112 Prime incubator | 1 | **390-0910** |
| INCU-Line® IL 180 Prime incubator | 1 | **390-0911** |

| Description | For | Pk | Cat. No. |
|---|---|---|---|
| **Accessories** | | | |
| Stainless steel wire shelf | DL/VL/IL/ILPR 56 | 1 | **466-0454** |
| Stainless steel wire shelf | DL/VL/IL/ILPR 112 | 1 | **466-0455** |
| Stainless steel wire shelf | DL/VL/IL 180 | 1 | **466-0456** |
| Base on castors | DL/VL/IL 180 | 1 | **466-0457** |

# Digital cooled incubator, INCU-Line®, IL 23R

The IL 23R digital cooled incubator with Peltier technology offers an economical and space saving solution for microbiology applications at below room temperature. The temperature can be freely adjusted in increments of 0,1 °C from 10 °C below ambient up to a maximum of 50 °C. The built-in Peltier element has a low energy consumption and ensures temperature stability and uniformity over the complete temperature range. The transparent Plexiglas® window allows full visibility of the samples inside the incubator. The housing is constructed entirely of epoxy coated mild steel.

- Compact design
- Digital PID control with PT100 sensor and LED display, temperature control can be readjusted with a certified reference temperature measuring instrument
- Excellent temperature stability
- Low energy consumption, only 80 W
- Easy to use, safe and reliable

IL 23R is supplied with two perforated stainless steel shelves and a test certificate (data measured at 37 °C).

* Measured with the chamber empty.




| | |
|---|---|
| Temperature range (°C) | 10 below ambient...50 °C |
| Temperature fluctuation (time) (°C) | ±0,2 at 37 °C * |
| Temperature variation (spatial) (°C) | ±1,0 at 37 °C * |
| Capacity (l) | 23 |
| Convection type | Natural convection |
| Shelves supplied (max.) | 2 (3) |
| Max. load per shelf (kg) | 3 |
| Int. W×D×H (mm) | 294×300×270 |
| Ext. W×D×H (mm) | 380×470×450 |
| Nominal power consumption (W) | 80 |
| Weight (kg) | 19,2 |

| Type | Pk | Cat. No. |
|---|---|---|
| INCU-Line® IL 23R | 1 | **390-0881** |

| Description | Pk | Cat. No. |
|---|---|---|
| **Accessories** | | |
| Tube rack for dip slides, 2×6 positions, Ø 32 mm | 1 | **390-0386** |
| Extra shelf for IL 23 / IL 23R / IL Tower, stainless steel, 286×285 mm | 1 | **390-0483** |

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# Cooled incubator INCU-Line® Tower

The INCU-Line® Tower is a general purpose, dual chamber, cooled incubator with natural convection. This digital cooled incubator with Peltier technology offers an economical and space saving solution for microbiology applications at below room temperature. The built-in Peltier element has low energy consumption (only 35 W at 37 °C) and ensures temperature stability and uniformity over the entire temperature range.

- Compact design with a footprint of only 0,18 $m^2$
- Digital PID control with PT100 sensor and LED display (resolution 0,1 °C)
- Excellent temperature stability, temperature accuracy at 37 °C is ±0,5 °C
- Temperature control can be re-adjusted with a certified reference temperature measuring instrument
- Easy to use, safe and reliable

The temperature can be freely adjusted in increments of 0,1 °C from 10 °C below ambient up to a maximum of 50 °C. The 2 chambers can operate independently at different temperatures and be switched off separately. Each chamber has its own transparent door, so samples can be observed without opening the door, thus preventing temperature changes within the chambers. The housing is constructed entirely of epoxy coated mild steel.

Supplied with two perforated stainless steel shelves per chamber and a test certificate (data measured at 37 °C).

* Measured with the chamber empty.




| Model | INCU-Line Tower |
|---|---|
| Temperature range (°C) | Ambient –10...+50 |
| Temperature fluctuation (time) (°C) | ±0,2 at 37 °C * |
| Temperature variation (spatial) (°C) | ±1,0 at 37 °C * |
| Capacity (l) | 2×23 |
| Convection type | Natural convection |
| Shelves supplied (max.) | 2 (3) per chamber |
| Max. load per shelf (kg) | 3 |
| Int. W×D×H (mm) | 2× (294×300×270) |
| Ext. W×D×H (mm) | 380×470×790 |
| Nominal power consumption (W) | 160 |
| Weight (kg) | 34 |

| Type | Pk | Cat. No. |
|---|---|---|
| INCU-Line® Tower dual chamber cooled incubator | 1 | **390-0963** |

| Description | Pk | Cat. No. |
|---|---|---|
| **Accessories** | | |
| Tube rack for dip slides, 2×6 positions, Ø 32 mm | 1 | **390-0386** |
| Extra shelf for IL 23/IL 23R/IL Tower, stainless steel, 286×285 mm | 1 | **390-0483** |

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## IQ/OQ/PQ for VWR® ovens and incubators

Giving you the confidence and proof that your laboratory equipment performs reliably and to specification. Validation is done by trained and authorised VWR service engineers:

- Installation qualification (IQ): To verify that the system has been installed to manufacturer's requirements
- Operational Qualification (OQ): All functions of the equipment being validated are tested, results recorded and pass/fail of all tests determined by comparing results with pre-determined acceptance limits
- Performance qualification (PQ): The functions of the equipment are tested with loaded chamber to customers specification



# Cooled incubators, INCU-Line® Standard



*IL 68R*



*IL 150R*

These compressor cooled incubators with forced air convection feature a stainless steel inner chamber and a powder coated sheet exterior. The IL 68R has an external glass door, the IL 150R/250R models have a solid outer door and internal glass door. All models have an internal LED light, 30 mm access port, real time clock, internal electrical socket, internal memory (up to 2046 data records) and USB interface (at rear) for downloading data to a PC.

- Microprocessor controller with LCD graphic display, stores up to 3× six-segment programs
- Temperature range: +3  to 70 °C
- Timer from 1 min to 31 days or continous operation
- Loop function up to 99 times or endless
- IL 150R models are stackable without additional stacking kit

All Standard models have the following safety features:
*Adjustable over- and under-temperature safety thermostat Class 3.3 protects the samples and the incubator
*Power failure control system, audible and visual temperature alarm
*Temperature sensor fail alarm
*Door lock and open door alarm
*Auto-diagnostic function

Supplied with coated wire shelves, test certificate (data measured at 37 °C) and Basic Control Software to download data from internal memory.

| Model | IL 68R | IL 150R | IL 250R |
|---|---|---|---|
| Temperature range (°C) | | +3...70 | |
| Temperature fluctuation (time) (°C) | ±0,1 at 37 °C | ±0,2 at 37 °C | ±0,3 at 37 °C |
| Temperature variation (spatial) (°C) | ±0,3 at 37 °C | ±0,8 at 37 °C | ±1,0 at 37 °C |
| Capacity (l) | 68 | 143 | 245 |
| Convection type | | Forced convection | |
| Shelves supplied (max.) | 2 (2) | 3 (4) | 4 (6) |
| Max. load per shelf (kg) | | 10 | |
| Max. chamber capacity (kg) | 20 | 30 | 50 |
| Int. W×D×H (mm) | 470×300×430 | 520×410×660 | 520×410×1060 |
| Ext. W×D×H (mm) | 570×680×600 | 620×650×860 | 620×650×1260 |
| Nominal power consumption (W) | | 250 | |
| Weight (kg) | 41 | 68 | 86 |

| Type | Pk | Cat. No. |
|---|---|---|
| INCU-Line® IL 68R cooled incubator | 1 | **390-0728** |
| INCU-Line® IL 150R cooled incubator | 1 | **390-0729** |
| INCU-Line® IL 250R cooled incubator | 1 | **390-0731** |

| Description | For | Pk | Cat. No. |
|---|---|---|---|
| **Accessories** | | | |
| Wire coated shelf | INCU-Line® IL 68R Standard | 1 | **390-0733** |
| Wire coated shelf | INCU-Line® IL 150R/250R Standard | 1 | **390-0734** |

# Cooled incubators, INCU-Line® Premium

These compressor cooled incubators with forced air convection have a temperature range between +3 to 70 °C and feature a stainless steel inner chamber and a stainless steel linen finish exterior. The models have a solid outer door and glass inner door. All models have an internal LED light, internal electrical socket, 30 mm access port, real time clock, timer (1 min to 999:59 h or continous operation), internal memory to store up to 4100 data records for each user and USB port with flash drive for data recording.

- Full colour LCD touch screen displays the values in tabular or graphic form
- Administrator function to manage user accounts, 20 user program memory, 7-day programming
- Multi-segment temperature-time profile (up to 9) with adjustable ramps
- Adjustable start delay feature (from 1 minute to 99:59 hours or date/time)
- Ethernet connection (LAN port) and remote control via Internet
- Fan speed control (50 to 100%)
- IL 150R Premium models are stackable without additional stacking kit

Premium models have the following safety features:
*Adjustable over- and under-temperature safety thermostat Class 3.3 protects the samples and the incubator
*Power failure control system, audible and visiual temperature alarm
*Door lock and an open door alarm
*Temperature sensor fail alarm and auto-diagnostic function
*Automatic fan shut-down after completing the program

Supplied with stainless steel wire shelves, Ethernet cable, test certificate (data measured at 37 °C) and Premium Control Software on USB stick.




*IL 150R Premium*




*IL 250R Premium*

| Model | IL 150R Premium | IL 250R Premium |
|---|---|---|
| Temperature range (°C) | +3...70 | |
| Temperature fluctuation (time) (°C) | ±0,2 at 37 °C | ±0,3 at 37 °C |
| Temperature variation (spatial) (°C) | ±0,8 at 37 °C | ±1,0 at 37 °C |
| Capacity (l) | 143 | 245 |
| Convection type | Forced convection | |
| Shelves supplied (max.) | 3 (4) | 4 (6) |
| Max. load per shelf (kg) | 10 | |
| Max. chamber capacity (kg) | 30 | 50 |
| Int. W×D×H (mm) | 520×400×660 | 520×400×1060 |
| Ext. W×D×H (mm) | 620×640×920 | 620×640×1320 |
| Nominal power consumption (W) | 170 | 330 |
| Weight (kg) | 63 | 84 |

| Type | Pk | Cat. No. |
|---|---|---|
| INCU-Line® IL 150R Premium cooled incubator | 1 | **390-0730** |
| INCU-Line® IL 250R Premium cooled incubator | 1 | **390-0732** |

| Description | For | Pk | Cat. No. |
|---|---|---|---|
| **Accessories** | | | |
| Stainless steel shelf | INCU-Line® IL 150R/250R Premium | 1 | **390-0735** |

# Cooled incubators, INCU-Line® CR Premium

These compressor-cooled incubators, with forced air convection and fan speed control, feature an acid-proof stainless steel (DIN1.4301) inner chamber and a powder coated sheet exterior. The adjustable heating and cooling system provides a temperature range between –10 to +100 °C. All models have a solid outer door and an internal glass door. The larger IL 400CR and IL 750CR models have double outer doors. All models are equipped with levelling castors, 30 mm access port, internal light, USB port to allow direct recording and data transfer onto a flash drive and Ethernet (LAN) port for remote control.

- Multi-functional microprocessor controller with colour LCD touch screen, displays values in tabular or graphic form
- Access control via login, 20 user-program memory, 7 day programming
- Administrator function to manage user accounts
- Multi-segment temperature/time profile (up to 100) with adjustable ramps
- Real time clock displays date/time/weekday
- Adjustable start delay feature
- Adjustable over- and under-temperature safety thermostat Class 3.3 protects samples and the incubator

Safety features include audible and visible temperature alarms, power failure control system, audible clock alarm, automatic defrosting function, door lock and open door alarm, temperature sensor fail alarm and auto-diagnostic function.

Units feature Premium control software and aid GLP compliance with password protection settings, events registry and an internal memory which stores up to 4100 data records for each user, allowing the values to be viewed on the display or a PC in tabular or graphic form.

The standard spare shelves have a maximum workload of 25 kg per shelf. The reinforced stainless steel shelves (optional for IL 240CR and IL 400CR) have a maximum workload of 100 kg per shelf. Please note the maximum chamber capacity as shown in the specification.



IL 240CR Premium

All models are supplied with test certificate (data measured at 37 °C), Ethernet cable and Premium Control Software on USB stick. The IL 750CR models are supplied with three reinforced stainless steel wire shelves, the IL 240CR and IL 400CR models are supplied with three standard stainless steel wire shelves.

| Model | IL 240CR Premium | IL 400CR Premium | IL 750CR Premium |
|---|---|---|---|
| Temperature range (°C) | | –10...+100 | |
| Temperature fluctuation (time) (°C) | | ±0,2 at 37 °C | |
| Temperature variation (spatial) (°C) | | ±0,3 at 37 °C | |
| Capacity (l) | 245 | 424 | 749 |
| Convection type | | Forced convection | |
| Max. load per shelf (kg) | 25 | | 100 |
| Max. chamber capacity (kg) | 90 | 120 | 140 |
| Nominal power consumption (W) | 800 | 1200 | 1800 |
| Weight (kg) | 140 | 179 | 253 |

| Type | Shelves supplied (max.) | W×D×H ext. (mm) | W×D×H int. (mm) | Pk | Cat. No. |
|---|---|---|---|---|---|
| INCU-Line® IL 240CR Premium cooled incubator | 3 (10) | 820×760×1430 | 600×510×800 | 1 | **390-0964** |
| INCU-Line® IL 400CR Premium cooled incubator | 3 (14) | 1040×740×1650 | 800×510×1040 | 1 | **390-0965** |
| INCU-Line® IL 750CR Premium cooled incubator | 3 (16) | 1260×860×1820 | 1040×600×1200 | 1 | **390-0966** |

| Description | For | Pk | Cat. No. |
|---|---|---|---|
| **Accessories** | | | |
| Stainless steel wire shelf | IL 240PR/IL 240CR Premium cooled incubator | 1 | **390-0967** |
| Stainless steel wire shelf | IL 400CR Premium cooled incubator | 1 | **390-0968** |
| Reinforced stainless steel wire shelf | IL 240PR/IL 240CR Premium cooled incubator | 1 | **390-1035** |
| Reinforced stainless steel wire shelf | IL 400CR Premium cooled incubator | 1 | **390-1036** |
| Reinforced stainless steel wire shelf | IL 750CR Premium cooled incubator | 1 | **390-1037** |

# Cooled incubators with Peltier technology, INCU-Line® ILPR series

2 year warranty main unit only

Cooled incubators with Peltier technology feature excellent temperature stability and uniformity. They are energy efficient and environmentally friendly, with a low noise level, and they work almost vibration-free as no compressor is installed. No dehumidification of samples due to the closed chamber. These models with forced air convection provide a temperature range between 0 to +70 °C (max. 20° C below ambient), feature a stainless steel (DIN 1.4301) inner chamber and stainless steel housing, solid outer door and internal glass door. The modern, intuitive controller, with 7" full colour touch screen display, shows actual temperature, set temperature and time of the actual program.




- Internal memory (can store up to 10 000 data records)
- USB interface on front panel (for data transfer via USB stick)
- Real time clock (displays date and time)
- Timer (adjustable from 1 min to 365 days or continuous operation)
- Display shows elapsed or remaining time of actual program
- Access port (30 mm Ø on left side)
- INCU-Line IL 56PR and IL 112PR models are stackable as 2× IL 56 PR or 2× IL 112PR without additional stacking kit, it is possible to place the IL 56PR on top of the IL 112PR. The IL 240PR models are not stackable

Users can view three different windows on the touch panel display, swiping left or right to switch between windows. The Quick change mode allows user to change the set temperature and time without stopping the active program The status of the device is indicated by icons on the display. These show if:
*Unit is cooling down or heating up (ramp status)
*Unit has reached set temperature status (timer starts)
*Fan (speed not adjustable) is running (at 100% during ramp or set temperature status)
*Internal LED light is on (when door is open)
*Door is open or closed

Safety features include adjustable over- and under-temperature safety thermostat Class 3.3 to protects samples and the incubator, audible and visible open door alarm, temperature alarms, power failure control system, temperature sensor fail alarm and auto-diagnostic function.

The standard spare shelves have a maximum workload of 25 kg per shelf. The optional reinforced stainless steel shelves for IL 240PR units have a maximum workload of 100 kg per shelf. Maximum chamber load is shown in the specification. The optional Basic Software available on a USB stick for ILPR models enables user to download data from internal memory.

All models are supplied with two stainless steel wire shelves, except IL 240PR which has three shelves, a test certificate (data measured at 37 °C), 2 keys for the door lock and multilingual instruction manual on CD.

| Model | IL 56PR | IL 112PR | IL 240PR |
|---|---|---|---|
| Temperature range (°C) | 0...+70 (max. 20 °C below ambient) | | |
| Temperature fluctuation (time) (°C) | ±0,1 at 37 °C | | |
| Temperature variation (spatial) (°C) | ±0,2 at 37 °C | | ±0,3 at 37 °C |
| Capacity (l) | 56 | 112 | 245 |
| Convection type | Forced convection | | |
| Shelves supplied (max.) | 2 (5) | 2 (7) | 3 (10) |
| Max. load per shelf (kg) | 25 | | |
| Max. chamber capacity (kg) | 50 | | 90 |
| Int. W×D×H (mm) | 400×350×390 | 460×440×540 | 600×510×800 |
| Ext. W×D×H (mm) | 590×690×710 | 650×780×850 | 810×840×1140 |
| Nominal power consumption (W) | 500 | 600 | 1000 |
| Weight (kg) | 52 | 70 | 115 |

| Type | Pk | Cat. No. |
|---|---|---|
| INCU-Line® IL 56PR Peltier cooled incubator | 1 | **390-1031** |
| INCU-Line® IL 112PR Peltier cooled incubator | 1 | **390-1032** |
| INCU-Line® IL 240PR Peltier cooled incubator | 1 | **390-1033** |

| Description | For | Pk | Cat. No. |
|---|---|---|---|
| **Accessories** | | | |
| Stainless steel wire shelf | DL/VL/IL/ILPR 56 | 1 | **466-0454** |
| Stainless steel wire shelf | DL/VL/IL/ILPR 112 | 1 | **466-0455** |
| Stainless steel wire shelf | IL 240PR/IL 240CR Premium cooled incubator | 1 | **390-0967** |
| Reinforced stainless steel wire shelf | IL 240PR/IL 240CR Premium cooled incubator | 1 | **390-1035** |
| Basic software on USB stick | INCU-Line® ILPR Peltier cooled incubators | 1 | **390-1034** |

# Shaking incubators, INCU-Line®

Shaking incubators with a small footprint. These compact units feature a stackable design and expanded temperature range which makes the ILS 4 and ILS 6 ideal for molecular biology applications and general use. The integral orbital shaker means they are highly versatile. The SmartChek™ temperature control system (exclusive to the VWR Collection) guarantees precise temperature control. Mechanical convection maintains a stable temperature environment and provides quick recovery after opening the door. A safety thermostat is located on the back of the unit. The insulated door has a large, double glazed observation panel and opens to almost to180° for easy access.

- SmartChek™ temperature control system
- Digital display
- ILS 4 has stackable design to save space
- Full range of accessories available

* ILS 4 accommodates 4×1000 ml, 5×500 ml, 9×250 ml or 16×125 ml
** ILS 6 accommodates 4×2000 ml, 6×1000 ml, 8×500 ml, 12×250 ml or 20×125 ml or 30×50 ml flasks

Supplied with two full shelves. Other accessories are available, these must be ordered separately.




*ILS 4*




*ILS 6*

| Model | ILS 4 | ILS 6 |
|---|---|---|
| Int. W×D×H (mm) | 343×375×381 | 442×396×406 |
| Orbit (mm) | 19 | |
| Shaking motion | Orbital | |
| Speed range (min$^{-1}$) | 20 - 300 | |
| Temperature accuracy at 37 (°C) | ±0,1 | |
| Temperature range (°C) | Ambient +5...80 (in 0,1 °C increments) | |
| Temperature stability (°C) | ±0,25 | |
| Timer | 0 - 99 min/continuous | |
| Weight (kg) | 37,7 | 63,6 |
| W×D×H (mm) | 425×550×580 | 574×544×635 |

| Description | Pk | Cat. No. |
|---|---|---|
| INCU-Line® ILS 4 incubating shaker, chamber volume 49 litres | 1 | 444-0732 |
| INCU-Line® ILS 6 incubating shaker, chamber volume 71 litres | 1 | 444-0733 |

| Description | For | Pk | Cat. No. |
|---|---|---|---|
| **Accessories** | | | |
| Additional shelf | ILS 6 | 1 | 444-0831 |
| Additional full shelf | ILS 4 | 1 | 444-0832 |
| Additional half shelf | ILS 4 | 1 | 444-0833 |
| Shaking platform, pre-drilled for clamping flasks (supplied without clamps) | ILS 4* | 1 | 444-0834 |
| Flat platform, with non slip rubber mat (300×300 mm) | ILS 4 | 1 | 444-0835 |
| Flat double platform, with non slip rubber mat | ILS 4 | 1 | 444-0836 |
| Universal spring loaded clamp rack for flasks and bottles | ILS 4 | 1 | 444-0837 |
| Flat platform, with non slip rubber mat (390×330 mm) | ILS 6 | 1 | 444-0842 |
| Shaking platform, pre-drilled for clamping flasks (supplied without clamps)* | ILS 6** | 1 | 444-0843 |
| Flask clamp, for 125 ml flasks | ILS 4/ILS 6 | 1 | 444-0838 |
| Flask clamp, for 250 ml flasks | ILS 4/ILS 6 | 1 | 444-0839 |
| Flask clamp, for 500 ml flasks | ILS 4/ILS 6 | 1 | 444-0840 |
| Flask clamp, for 1000 ml flasks | ILS 4/ILS 6 | 1 | 444-0841 |
| Platform with 4×2000 ml flask clamps | ILS 6 | 1 | 444-0844 |
| Platform with 6×1000 ml flask clamps | ILS 6 | 1 | 444-0845 |
| Platform with 8×500 ml flask clamps | ILS 6 | 1 | 444-0846 |
| Platform with 12×250 ml flask clamps | ILS 6 | 1 | 444-0847 |
| Platform with 20×125 ml flask clamps | ILS 6 | 1 | 444-0848 |
| Platform with 30×50 ml flask clamps | ILS 6 | 1 | 444-0849 |



## Dip slides

Dip slides for microbiological monitoring of surfaces and in liquids. Each slide has media on both sides with a choice of the same medium or two different media on the two sides of the slides. This allows sampling of two surfaces with every slide. Testing with dip slides is a safe, reliable, economical and fast indicator of the presence of microorganisms. Dip slides with a push cap have a larger contact area.

- Supplied sterile
- Sampling takes only a few seconds
- The results are easily read after just 24 - 48 hours

| Type | Push cap | Screw cap |
|---|---|---|
| Contact area ($cm^2$) | 10 | 7 |
| Dimensions | 30 mm tube, 110 mm high | 24 mm tube, 92 mm high |
| Tray W×L (mm) | 50×22 | 50×15 |
| Paddle size (mm) | 80×28 | 72×20 |

| Description | Pk | Cat. No. |
|---|---|---|
| **Push cap** | | |
| Baird-Parker, on both sides | 10 | **535302D** |
| Baird-Parker, on both sides | 100 | **535303D** |
| Baird-Parker and total count agar | 10 | **535304D** |
| Baird-Parker and total count agar | 100 | **535305D** |
| Baird-Parker and VRBG | 10 | **535308D** |
| Malt extract agar, on both sides | 10 | **535328D** |
| Malt extract agar, on both sides | 100 | **535329D** |
| Nutrient agar and pseudomonas agar | 10 | **535182R** |
| Nutrient agar and pseudomonas agar | 100 | **535184T** |
| Nutrient agar with TTC, on both sides | 10 | **535092Q** |
| Nutrient agar with TTC and malt extract agar | 100 | **535104D** |
| Nutrient agar with TTC and neutralisers | 10 | **535309D** |
| Nutrient agar with TTC and neutralisers | 100 | **535310D** |
| TSA with TTC and rose bengal agar | 10 | **535112D** |
| TSA with TTC and rose bengal agar | 100 | **535114F** |
| Plate count agar and MacConkey agar | 100 | **535144L** |
| Plate count agar and OGYE agar with neutralisers | 100 | **535134J** |
| Plate count agar and VRBGA | 10 | **535162N** |
| Plate count agar and VRBGA | 100 | **535164P** |
| Plate count agar and VRBGA with neutralisers | 10 | **535172P** |
| Plate count agar MacConkey agar with neutralisers | 100 | **535154N** |

| Description | Pk | Cat. No. |
|---|---|---|
| **Push cap** | | |
| Plate count agar with neutralisers, on both sides | 10 | **535324D** |
| Plate count agar with neutralisers, on both sides | 100 | **535325D** |
| Plate count agar with TTC, on both sides | 10 | **535311D** |
| Plate count agar with TTC, on both sides | 100 | **535312D** |
| Plate count agar with TTC and MacConkey agar 3 | 100 | **535319D** |
| Plate count agar with TTC and MacConkey agar 3 | 10 | **535318D** |
| Plate count agar with TTC and MacConkey agar 3 with neutralisers | 10 | **535316D** |
| Plate count agar with TTC and MacConkey agar 3 with neutralisers | 100 | **535317D** |
| Plate count agar with TTC and neutralisers, on both sides | 10 | **535313D** |
| Plate count agar with TTC and neutralisers, on both sides | 100 | **535314D** |
| Pseudomonas CFC and MacConkey agar 3 | 10 | **535322D** |
| Pseudomonas CFC and MacConkey agar 3 | 100 | **535323D** |
| TSA with malt extract agar, on both sides | 10 | **535320D** |
| TSA with neutralisers, on both sides | 10 | **535326D** |
| TSA with neutralisers, on both sides | 100 | **535327D** |
| TSA with TTC and malt extract agar | 100 | **535321D** |
| **Screw cap** | | |
| Nutrient agar TTC, on both sides | 10 | **535306D** |
| Nutrient agar TTC, on both sides | 100 | **535307D** |

**For the complete range of of available dip slides visit our Website www.vwr.com**

## Petri dishes

PS. All dishes are manufactured under strict aseptic conditions using on-line production and packaging (Class 100). Sterile dishes are gamma-irradiated (10 kGy) with proof of sterility and batch number displayed on the box.

- Stable stacking
- Perfectly flat and retain shape up to 55 °C
- Excellent optical quality: Total transparency
- Stringent quality control procedures
- Compliant with automatic plate pourers

Certificates available upon request.



| Version | Ø (mm) | Height (mm) | Sterile | Pk | Cat. No. |
|---|---|---|---|---|---|
| With 6 vents | 55 | 14 | | 1.620 | **391-0865** |
| With 6 vents | 55 | 14 | + | 1.620 | **391-0895** |
| Without vents | 55 | 14 | | 1.620 | **391-0866** |
| Without vents | 55 | 14 | + | 1.620 | **391-0868** |
| Contact dish, 3 vents, double-outer bag | 65 | 14,5 | + | 720 | **391-1504** |
| With 3 vents | 90 | 14 | | 825 | **391-0439** |
| With 3 vents | 90 | 14 | + | 825 | **391-0455** |
| With 3 vents, double-outer bag | 90 | 14 | | 825 | **391-0891** |
| With 3 vents, double-outer bag | 90 | 14 | + | 825 | **391-0892** |

| Version | Ø (mm) | Height (mm) | Sterile | Pk | Cat. No. |
|---|---|---|---|---|---|
| Without vents | 90 | 14 | | 825 | **391-0441** |
| With 3 vents | 90 | 14 | | 480 | **391-0556** |
| Without vents | 90 | 14 | + | 825 | **391-0453** |
| Without vents, double-outer bag | 90 | 14 | + | 825 | **391-0894** |
| With 3 vents | 90 | 16 | | 480 | **391-0468** |
| Without vents | 90 | 16 | | 480 | **391-0467** |
| With 3 vents | 90 | 16 | + | 480 | **391-0469** |
| With 3 vents, 2 compartments | 90 | 16 | | 480 | **391-0492** |
| High, with 3 vents | 90 | 16 | | 700 | **391-0440** |
| High, with 3 vents | 90 | 16 | + | 700 | **391-0459** |
| High, with 1 vent | 90 | 16 | | 700 | **391-0443** |
| High, with 1 vent | 90 | 16 | + | 700 | **391-0458** |
| High, without vents | 90 | 16 | | 700 | **391-0442** |
| High, without vents | 90 | 16 | + | 700 | **391-0457** |
| With 3 vents | 140 | 21 | | 176 | **391-1500** |
| With 3 vents | 140 | 21 | + | 176 | **391-1502** |
| Without vents | 140 | 21 | | 176 | **391-1501** |
| Without vents | 140 | 21 | + | 176 | **391-1503** |


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# VWR® MEDIA ARE AVAILABLE IN A CHOICE OF FORMATS FOR MAXIMUM CONVENIENCE





## Dehydrated media

- 500g bottle and 5 kg drums
- Standard formulation and animal-free



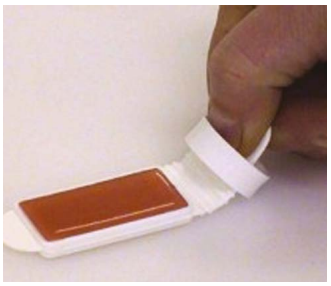
## Ready to use plates

- 90 mm Petri dishes
- 55 mm Petri dishes for water control (in bags and special RD-Packs)



## Dehydrated media in bags

- Add only water to prepare liquid media from 50 ml to 10 l
- Pre-weighed ready to make up bags
- Sterile: No need for an autoclave



## Contact slides for surface control

- Perfect for the food industry



## Granulated media

- Reduce dust
- Increase safety
- Easy and quick dissolution

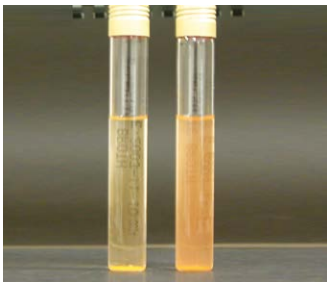


## Ready to use media in bottles



## Contact plates for surface and air control

- Special irradiated packaging options
- Blister with single plate packaging or
- Special RD-Packs



## Tubes with liquid media



## Culture media, ready to use in bags

**Microbiology media in bags are ideally suited for high sample volumes.**

- Space-saving packaging
- No risk associated with broken glass bottles
- Media can be easily and conveniently dispensed using a gravimetric diluter or peristaltic pump

GO TO **VWR.COM** TO SEARCH PRODUCTS OR DOWNLOAD A BROCHURE

## Extreme accuracy triple-display thermometers, Traceable



*620-1824*

These international standard digital thermometers provide exact readings necessary for critical requirements, quality control checks and routine measurements. The stainless steel probe shows the slightest temperature change in liquid, air/gas and semi-solids. It delivers exact time/date when temperatures rise above/fall below set points.

- Three-line display: Maximum/minimum and current temperatures
- Displays the exact time and date when the limits occurred
- Programmable alarm provides two visual (LED) and two audio alerts when temperature rises above or falls below high and low set points

Stainless steel probe (L×Ø: 15×3,2 mm) with 1,5 metre cable.

High accuracy of 0,05 °C at three points (within ±2,0 °C): 0,00; 25,00; 37,00 °C.

Certificate indicates traceability to standards provided by NIST. Compliance with ISO/IEC, ANSI/NCSL Z540-1 and 9001.

Supplied with Traceable calibration certificate, two AA batteries, stand, VELCRO® and magnetic strips, plus a wall mount.

| Range (°C) | Accuracy (°C) | Resolution (°C) | W×D×H (mm) | Weight (g) | Pk | Cat. No. |
|---|---|---|---|---|---|---|
| –2…+2 | ±0,05 | 0,01 | 106×69×20 | 142 | 1 | **620-1824** |
| 23…27 | ±0,05 | 0,01 | 106×69×20 | 142 | 1 | **620-1884** |
| 35…39 | ±0,05 | 0,01 | 106×69×20 | 142 | 1 | **620-1885** |
| –2…+2; 23…27; 35…39 | ±0,05 | 0,01 | 106×69×20 | 142 | 1 | **620-1886** |

## Large digit, triple-display thermometers, Traceable



*620-1584*

These jumbo size display thermometers are suitable for monitoring freezers, water baths, heating blocks, incubators and refrigerators. A bottle insulates the sensor from transient temperature changes when the refrigerator door is opened. Solution is GRAS (Generally Recognised As Safe) by the FDA (Food and Drug Administration).

- Triple-display: Maximum/minimum and current temperatures
- Out of range alarm programmable in 1,0 °C increments

Bottle probe in non toxic glycol solution or waterproof bullet probe (20 mm)

Traceability to NIST. Fulfils CDC and vaccine thermometer requirements. Compliant with ISO/IEC 17025, ANSI/NCSL Z540-1 and 9001.

Supplied with Traceable certificate of calibration, slot for wall mounting, VELCRO® and magnetic strips to attach to any surface, AAA battery and 3 metre cable.

| Range (°C) | Accuracy (°C) | Resolution (°C) | W×D×H (mm) | Weight (g) | Probe | Pk | Cat. No. |
|---|---|---|---|---|---|---|---|
| –50…+70 | ±1,0 | 0,1 | 99×111×22 | 113 | Bottle | 1 | **620-1584** |
| –50…+70 | ±1,0 | 0,1 | 99×111×22 | 113 | Waterproof bullet | 1 | **620-1585** |

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- Cell culture plastics
- Sera and reagents
- Cryopreservation

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## Large digit triple-display thermometers, Traceable Plus

Traceable Plus digital thermometers monitor temperatures in freezers, water baths, heating blocks, incubators and refrigerators.

- Maximum and minimum memory
- Calibration points at 0 and 50 °C
- Triple-display: Maximum, minimum and current temperatures
- Out of range alarm programmable in 1,0 °C increments
- Bottle insulates the sensor from transient temperature changes when the refrigerator door is opened (620-1582)

Bottle sensor in glycol solution or stainless steel bullet probe.

Traceable to NIST. Fulfils all CDC thermometer and vaccine thermometer requirements. Compliant with ISO/IEC 17025, ANSI/NCSL Z540-1 and 9001.




620-1583




620-1582

Supplied with Traceable certificate of calibration, AAA battery, plastic case, probe in bottle or not with 3 metre cable, flip-open stand, slot for wall mounting, VELCRO® and magnetic strips to attach to any surface.

| Range (°C) | Accuracy (°C) | Resolution (°C) | W×D×H (mm) | Weight (g) | Probe | Pk | Cat. No. |
|---|---|---|---|---|---|---|---|
| –50…+70 | ±0,5 | 0,1 | 75×62×15 | 113 | Bottle | 1 | **620-1582** |
| –50…+70 | ±0,5 | 0,1 | 75×62×15 | 113 | Stainless steel bullet (20 mm) | 1 | **620-1583** |

## Memory card thermometers, Traceable

Memory card reader (supplied) plugs into any USB port for an instant report. Text report includes date/time of day and sensor readings.

- Captures 5,9 million readings
- Sealed bottle sensor insulated from temperature changes when refrigerator is opened
- Solution in sealed bottle generally recognised as safe by FDA
- Minimum/maximum feature displays highest/lowest readings for any time period
- Alarm (visual and audible) set by the user for high and low values to the nearest 0,1 °C
- Unique four-line display: Temperature of detachable bottle probe, ambient temperature, humidity and time

Cable: 2 metres

Traceability provided from ISO/IEC 17025, ANSI/NCSL Z540-1 and 9001 and standards provided by NIST.

Supplied with probe, cable, 256 MB SD memory card, USB memory card reader, magnetic mounting strips, VELCRO®/wall mount/bench stand, three AA batteries, adapter and Traceable certificate of calibration.




620-1964




620-1963

| Range | Accuracy | Resolution | Probe | W×D×H (mm) | Weight (g) | Pk | Cat. No. |
|---|---|---|---|---|---|---|---|
| –30…+70 °C<br>0...99% RH | ±0,5 (0…25); ±0,6 (25…70); ±1,2 (–30…0; 50…70) °C<br>±5% RH (at 25 °C) ; ±7% RH elsewhere | 0,1 °C<br>0,1 RH | Bottle sensor (25×63 mm) | 110×91×30 | 200 | 1 | **620-1963** |
| –30…+70 °C<br>0...99% RH | ±0,5 (0…25); ±0,6 (25…70); ±1,2 (–30…0; 50…70) °C<br>±5% RH (at 25 °C) ; ±7% RH elsewhere | 0,1 °C<br>0,1 RH | Stainless steel (Ø×L: 4×25 mm) | 110×91×30 | 200 | 1 | **620-1964** |



## Calibratable ultra-accurate thermometers

These ready to use thermometers, with probe, are designed for temperature measurements which require high accuracy. They can be used for general purpose applications in air, gas, liquid and solids measurements, depending on the probe type. They are suitable for use in pharmaceutical and biotechnology companies (production and laboratories in the food industry), dairy products, fish, meat, healthcare, blood, government institutes and environment.

- Low battery warning indicator
- Calibratable: Offset and slope input
- Maximum/minimum memory and 'HOLD' function
- Large choice of probes: PT100 (620-1932) or K-, J-, N-, S- or T-type (620-2652, 620-2664)
- Temperature drift of 0,002 °C/K i.e. accuracy of 0,06 °C at 37 °C

Supplied with probe, 9 volt battery, certificate of calibration and transport case.

| Description | Range (°C) | Accuracy (°C) | Resolution (°C) | Probe | W×D×H (mm) | Weight (g) | Pk | Cat. No. |
|---|---|---|---|---|---|---|---|---|
| Handheld thermometer TD121, with plastic handle and probe (620-1944) | –200…+400 | ≤0,03 | 0,01; 0,1 | PT100 | 71×26×142 | 170 | 1 | **620-1932** |

| Description | Range (°C) | Ø×L (mm) | Pk | Cat. No. |
|---|---|---|---|---|
| **Ultra-accurate K-type probes** | | | | |
| Universal flexible probe for quick response in air, liquids, very small surfaces, twisted pair of PTFE-insulated thermowell wires and DIN-SMP connection | –65…+300 | 1×1000 | 1 | **620-1941** |
| **Ultra-accurate probes (PT)** | | | | |
| Immersion and air probe, PT100 with plastic handle, PVC cable (1 m) and DIN connection | –50…+400 | 3×150 | 1 | **620-1944** |
| Penetration probe, PT100 with plastic handle, PVC cable (1 m) and DIN connection | –50…+400 | 3×150 | 1 | **620-1945** |

## Infrared and core thermometer, Traceable

This easy to use, infrared, K-type thermometer allows the unit to take readings in less than 1 second.

- Field of view is 12:1
- Emissivity adjustable from 0,1 to 1,0 in 0,01 °C increments
- Maximum/minimum feature allows viewing of highest and lowest readings at any time
- Memory recalls captured temperatures, displays the average of all readings and the difference between the two
- Audible, user-settable, high and low alarms signal 'out of range' conditions, 'HOLD' function to freeze the display
- Cable length: 3 metres

Supplied with three-point Traceable® certificate of calibration (at 35; 50 and 150 °C (IR)), K-type probe (–40...+250 °C) and batteries with low level indicator.




| Range (°C) | Accuracy (%) | Resolution (°C) | W×D×H (mm) | Pk | Cat. No. |
|---|---|---|---|---|---|
| **(IR)** –60…+500; **(TC)** –64…+1400 | ±1,0 °C or 2,0 | 0,1 | 178×70×38 | 1 | **620-2203** |

| Description | Range (°C) | Ø×L (mm) | Pk | Cat. No. |
|---|---|---|---|---|
| **Ultra-accurate K-type probes** | | | | |
| Immersion probe with 135 mm plastic handle, 1 m cable and DIN-SMP connection | –65…+550 | 1,5×130 | 1 | **620-1938** |
| Penetration probe with plastic handle (135 mm), cable (1 m) and DIN-SMP connection | –65…+1000 | 3×130 | 1 | **620-1940** |
| Universal flexible probe for quick response in air, liquids, very small surfaces, twisted pair of PTFE-insulated thermowell wires and DIN-SMP connection | –65…+300 | 1×1000 | 1 | **620-1941** |
| Air/gas probe for deep frozen goods with plastic handle (135 mm), cable (1 m) and DIN-SMP connection | –65…+600 | 6×130 | 1 | **620-1942** |



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