# Continuous pH measurements and quality control with the G185 SensorTech.

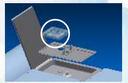
PH measuring is possible in the G185 SensorTech version by using an external system based on infrared monitoring, which unlike other systems ensure effective and highly accurate long term measurements without the need for cleaning. The system has a resolution of 0.01 pH and an accuracy of ±0.03 pH.

Optimal embryo growth development requires the proper pH in the growth medium. The optimal pH may differ for different media, but is usually recommended to be between 7.2 and 7.4.

The G185 SensorTech is designed to allow for external monitoring of both temperature and $CO_2$ to ensure continuous and effective quality control.

**pH Online Sensor**

Resolution 0.01 pH
Accuracy ±0.03 pH
Range 5.5-9.0 pH



Pre-calibrated
Sensor Dish for Non-contact
Measurement

**High precision instruments ensure effective calibration and monitoring**

In order to properly calibrate and monitor the temperature and gas parameters in the G185 we offer a high precision thermometer and a highly accurate $CO_2$ + $O_2$ Analyzer. Using these accessories will ensure accurate calibration and control of the incubator over time.

**Thermometer**

The ASL WIKA CTH7000 is a high accuracy handheld thermometer offering:

- System accuracies better than 0.035°C over the full operating range.
- Stability: <0.005°C per year.

**$CO_2$ and $O_2$ Gas Analyser**

The gas analyzer is specifically designed to monitor $CO_2$/$O_2$ for verification and calibration of incubators.

It is fast, simple to use and highly accurate

- Fast verification of $O_2$ + $CO_2$ levels
- $CO_2$ 0-20%
- $O_2$ 0-100%


Overall dimensions (WxDxH)
1100x830x1620mm
Weight: 100 kg.

## Save space with the G185 and the K-Systems Stacking System

The Stacking system ensures space saving in the clinic and is designed with room for a computer at the bottom connecting to all three systems, allowing for central monitoring on one screen.

- Sliding shelves with soft closure function
- Cooling system for heat removal
- Tray system for tubes and cable
- Internal electrical sockets
- Internal power outlet for three incubators

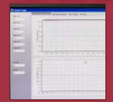
| Technical specifications | G185 Standard | G185 SensorTech |
|---|---|---|
| Overall dimensions (WxDxH) | 850x558x152,5 mm | 850x558x152,5 mm |
| Weight | 38 kg | 38 kg |
| Temperature range in chambers | Ambient to 42,9°C | Ambient to 42,9°C |
| $CO_2$ / $O_2$ – range in chambers | 2-10% / 2-20% | 2-10% / 2-20% |
| Connection to 100% $CO_2$ and 100% $N_2$ | √ | √ |
| Gas consumption | 0,7 l/h $CO_2$ & 7 l/h $N_2$ | 0,7 l/h of $CO_2$ & 7 l/h of $N_2$ |
| Recovery time | $CO_2$: < 2 min; $O_2$: < 4 min | $CO_2$: < 2 min; $O_2$: < 4 min |
| Datalogger system | √ | √ |
| Prepared for pH monitoring | | √ |
| Prepared for external $CO_2$- und temperature measurement | | √ |
| SMS alert function (optional) | √ | √ |
| Ambient humidity and temperature | max 75% RH & 20-30°C | max 75% RH & 20-30°C |
| Heating plates | NUNC/Falcon/Vitrolife | NUNC/Falcon/Vitrolife |

Designed and Optimized for Human IVF

# G185

## Long Term Flat Bed Incubator



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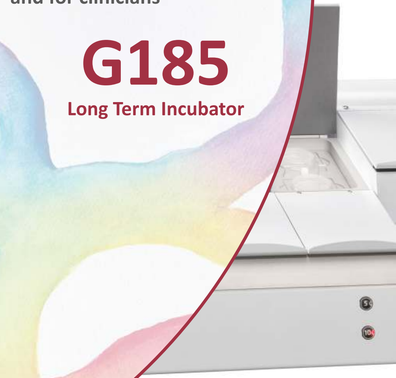
G185-SC-20082016

The optimal incubation solution for embryos and for clinicians

# G185

## Long Term Incubator



CE 0543

a CooperSurgical Company

# G185 and G185 SensorTech


# Unrivalled environmental control to ensure optimal conditions for embryos and eggs

**Stable pH levels are achieved through the combination of K-Systems heating and gas control system**

The G185 ensures safe and careful incubation, giving the best conditions for optimal embryo development. Stable pH levels and osmolality of the medium during culture is ensured.

All critical parametres are monitored and controlled chamber by chamber, which ensures:

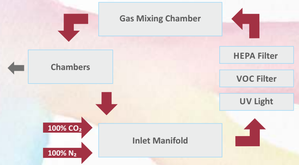
- Stable pH
- Stable heating
- Stable gas levels

The chamber-by-chamber temperature control combined with the direct heat from the heating plates to the cultures ensures optimal temperature conditions at all times.

The integrated gas mixing system gives you the option to mix $CO_2$ and $O_2$ to your specifications. Before entering the gas mixing chamber, the gas circulates through multiple filters:

- HEPA filter to remove airborne particles
- UV light to eliminate organic microbes
- VOC filter to remove organic compounds.

The special flow system ensures constant grade A gas in each chamber. Each individual chamber recovers in less than 2 minutes.




Working with an oil overlay in the G185 will delay gas diffusion and help stabilize the PH levels and osmolality of the medium during culture.

**Fewer stress factors for the embryos**

The G185 is designed to minimize the stress factors to the embryos.

The G185 is a non-humid incubator, which strongly minimizes the risk of fungal growth inside the incubator and makes it easier to clean. The use of the oil overlay helps separate the medium from the atmosphere and any airborne particles or pathogens.

The incubator includes 10 individual incubation chambers to ensure minimal metabolic stress and risk of cross contamination for the embryos.

# Everyday embryo culture made effective, easy and reliable

**With the best embryo conditions combined with an intuitive design and low running costs the G185 is the ideal work horse in a busy clinic**

Due to its design the G185 will accommodate up to 10 patients and help you save significant space in your clinic

With the one-step lids, indicator lights and an effective "control bar" using the system on a daily basis is simple and straight forward.

The unit can be connected to CO2 alone or you can add N2 to reduce the oxygen level.

The G185 uses pure $CO_2$ and $N_2$ gas. Combined with the limited gas intake when opening a chamber, this ensures low annual running costs.

Dimensions: 970x558x152,5 mm
Weight 38 kg

**Stable and reliable results now and in the future**

With more than 700 IVF installations around the world and clinical trials and validations proving its effectiveness, the G185 has been proven to be a very effective long term incubator.

# Effective monitoring and quality control built in

**Through detailed monitoring and alarm systems you can react quickly and effectively to changing conditions in the incubator**

The G185 is equipped with extensive alarm and monitoring options. This assures you that the conditions in the incubator are constantly monitored and you can react quickly if conditions changes.

All versions include a data logging package which allows you to monitor and log all vital parameters.

- Temperature control of each zone
- $CO_2$ & $O_2$ gas concentration
- $CO_2$ & $O_2$ gas flow and pressure
- Daily averages for all parameters
- Alarm record register
- E-mail signal function when an alarm is activated

All data are logged as an excel file and can be connected to a folder on a dedicated PC. 3 x G185's can be monitored from one PC.