

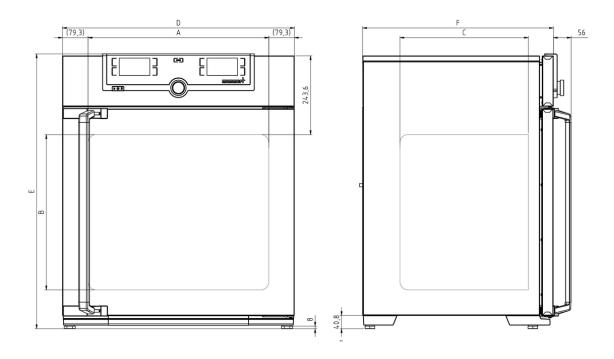
## CO<sub>2</sub> Incubator

# ICO105med

Safety at all times: High-end functions for the protection of cell cultures, bacteria cultures or tissue cultures.



On this page, you can find all the essential technical data on the Memmert CO<sub>2</sub> incubator ICOmed. Our customer relations team will be pleased to help if you want further information. If you should require a customised special solution, please contact our technical specialists at myAtmoSAFE@memmert.com.



Temperature	
Working-temperature range	5 °C above ambient temperature up to +50 °C Standard sterilisation programme: 60 minutes at 180°C (without removing the sensors)
Setting temperature range	+18 to +50 °C
Setting accuracy temperature	0.1 °C
Temperature sensor	2 Pt100 sensors DIN Class A in 4-wire-circuit for mutual monitoring, taking over functions in case of an error
Humidity	
Humidity control (standard)	Humidity limitation thanks to a Peltier element; when water dish is full and inserted, the Peltier element limits the value of relative humidity in the interior to 93 $\%$ rh +/- 2.5 $\%$
Setting accuracy humidity	0.5 % rh
Setting range active humidity control (with option K7)	40 to 97 % rh and rh-Off
Control of standard com	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic
	ponents  Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation
	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic
CO2 control	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation
CO2 control  Adjustment range CO2	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation  0 to 20 % CO2
CO2 control  Adjustment range CO2  Setting accuracy CO2	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation  0 to 20 % CO2  0,1%
Adjustment range CO2 Setting accuracy CO2 Variation in time CO2 Adjustment range O2 (with	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation  0 to 20 % CO2  0,1%  +/- 0.2 % CO2
Adjustment range CO2 Setting accuracy CO2 Variation in time CO2 Adjustment range O2 (with option T6) Setting accuracy O2	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation  0 to 20 % CO2  0,1%  +/- 0.2 % CO2  1 to 20 % O2
Adjustment range CO2 Setting accuracy CO2 Variation in time CO2 Adjustment range O2 (with option T6)	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation  0 to 20 % CO2  0,1%  +/- 0.2 % CO2  1 to 20 % O2
Adjustment range CO2 Setting accuracy CO2 Variation in time CO2 Adjustment range O2 (with option T6) Setting accuracy O2  Control technology	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation  0 to 20 % CO2  0,1%  +/- 0.2 % CO2  1 to 20 % O2  0.1 % O2  TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition
Adjustment range CO2 Setting accuracy CO2 Variation in time CO2 Adjustment range O2 (with option T6) Setting accuracy O2  Control technology ControlCOCKPIT	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation  0 to 20 % CO2  0,1%  +/- 0.2 % CO2  1 to 20 % O2  TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.
Adjustment range CO2 Setting accuracy CO2 Variation in time CO2 Adjustment range O2 (with option T6) Setting accuracy O2  Control technology ControlCOCKPIT  Language setting	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation  0 to 20 % CO2  0,1%  +/- 0.2 % CO2  1 to 20 % O2  TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.  German, English, Spanish, French, Polish, Czech, Hungarian
Adjustment range CO2 Setting accuracy CO2 Variation in time CO2 Adjustment range O2 (with option T6) Setting accuracy O2  Control technology ControlCOCKPIT  Language setting Function SetpointWAIT	Digital electronic CO2 control with dual beam NDIR system, with auto-diagnostic system and acoustic fault indication, barometric pressure compensation  0 to 20 % CO2  0,1%  +/- 0.2 % CO2  1 to 20 % O2  TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.  German, English, Spanish, French, Polish, Czech, Hungarian the process time does not start until the set temperature is reached

programme stored in case of power failure

via Ethernet interface or USB port

 $At mo CONTROL\ software\ on\ a\ USB\ stick\ for\ programming,\ managing\ and\ transferring\ programmes$ 

Documentation

Programming

AutoSAFETY	additionally integrated over- and undertemperature protection "ASF", automatically following the setpoint value at a preset tolerance range, alarm in case of over- or undertemperature, heating function is switched off in case of overtemperature, cooling function in case of undertemperature
Autodiagnostic system	integral fault diagnostics for temperature and CO2
Alarm	visual and acoustic
	visual and acoustic

### **Heating concept**

6 sides large-area multi-function heating system on four sides with additional door and back heating to avoid condensation

### Standard equipment

Standard accessories	Membrane filter (in order to remove impurities and pollutants, all incoming gases pass through a membrane filter before they reach the chamber)
Door	fully insulated stainless steel door with 2-point locking (compression door lock)
Internals	2 perforated stainless steel shelf/shelves
Works calibation certificate	incl. works calibration certificate (measuring point chamber centre) at +37°C, 5 % CO2 for standard units
Internals	1 stainless steel water dish
Door	inner glass door with opening (8 mm Ø) to take gas sample

#### Stainless steel interior

Dimensions	$w_{(A)} \times h_{(B)} \times d_{(C)}$ : 560 x 480 x 400 mm (d less 35 mm for fan)
Interior	material 1.4301 (ASTM 304), corrosion resistant
Volume	107 l
Max. number of internals	6
Max. loading of chamber	90 kg
Max. loading per internal	15 kg

### Textured stainless steel casing

Dimensions	w <sub>(D)</sub> x h <sub>(E)</sub> x d <sub>(F)</sub> : 719 x 850 x 591 mm (d +56mm door handle)
Housing	rear zinc-plated steel

#### **Electrical data**

Voltage	230 V, 50/60 Hz
Electrical load	approx. 1300 W
Voltage	115 V, 50/60 Hz
Electrical load	approx. 1300 W

#### **Ambient conditions**

Set Up	The distance between the wall and the rear of the appliance must be at least 15 cm. The clearance from the ceiling must not be less than 20 cm and the side clearance from walls or nearby appliances must not be less than 5 cm.
Ambient temperature	10 °C to 35 °C
Humidity rh	max. 70 %, non-condensing
Altitude of installation	max. 2,000 m above sea level
Overvoltage category	II
Pollution degree	2

# Packing/shipping data

Transport information	The appliances must be transported upright
Customs tariff number	8419 8998
Country of origin	Federal Republic of Germany
WEEE-RegNo.	DE 66812464
Dimensions approx incl. carton	w x h x d: 800 x 1030 x 800 mm
Net weight	approx. 75 kg
Gross weight carton	approx. 100 kg

### Standard units are safety-approved and bear the test marks





