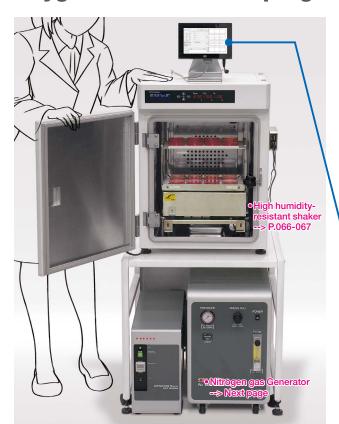
Oxygen concentration program unit MG-PU01



Enables Various patterns of oxygen concentration change by connecting to the Multi-gas incubator MG-71M!

•Multi-gas incubator MG-71M --> P.048

Features and Applications

- Reproduction In vivo environment by changing oxygen
- Recording of Gas concentration and temperature

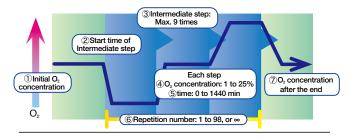


Operation with Touch panel

Model	MG-PU01
Applicable model	MG-71M
Configuration	Touch panel PC (Built-in Control software), Connection cable, AC adapter, Power cable, Stylus pen
System requirements	MG-71M, N ₂ /O ₂ /CO ₂ Gas (O ₂ Gas not required if no Step in which O ₂ concentration is boosted)

Program specifications ①Initial O₂ concentration ③Intermediate step: Max. 9 times Protocol setting (7) O₂ concentration after the end. Up to 5 programs can be saved and invoked. Step setting (4)O2 concentration and (5)Connection time are set as 1 step. O₂ concentration setting 1 to 25%. Set in 0.1% Connection time setting 0 to 1440 min (24 hours), Set in 1 min ** © Repetition number: 1 to 98 arbitrarily set* in "Intermediate step: Max. 9 times". Setting "1" makes each step only one time. Repetition setting Entering "0" keeps Initial O₂ concentration. 2 Start time of the Intermediate step or Immediately after the Start time setting The temperature and the concentration of O_2 and CO_2 inside the MG-71M chamber can be logged at 1-minute intervals Data log and its data written in USB memory

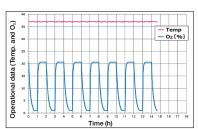
Schematic diagram



Reference performance		
O ₂ Concentration change range	1% to approx. 20.9% (Atmospheric concentration)	
O ₂ control accuracy	Conformed to MG-71M accuracy (0.2%)	
O ₂ rise speed	Depends on the supply flow rate to MG-71M, 1%> 20%: Around 5 min (When O ₂ Gas cylinder is used)	
O ₂ drop speed	Depends on the supply flow rate to MG-71M, 20%> 1%: Within 15 min (When N ₂ Gas cylinder is used) 60 to 90 min (When N ₂ GENESIS is used)	

Changes oxygen concentration according to the duration

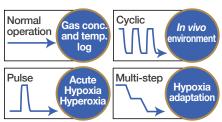
Oxygen concentration program unit can be connected to the Multigas incubator MG-71M to change the oxygen concentration inside the chamber. The change of blood flow and oxygen such as inside a tumor can be simulated.



Experimental result

The pattern of oxygen concentration changes in high flexibility

The pattern of oxygen concentration changes can be created with high flexibility. Not only periodical hypoxic condition but also multistep change and repetition number can be set. As a Data logger for Temp. and Gas concentration inside the Chamber. The temperature and concentration of $\rm O_2$ and $\rm CO_2$ inside the MG-71M chamber can be logged at 1-minute intervals and its data written in USB memory.



As a Data logger for Temp. and Gas concentration inside the Chamber

The temperature and the concentration of O_z and CO_z inside the MG-71M chamber can be logged at 1-minute intervals and its data written in USB memory.