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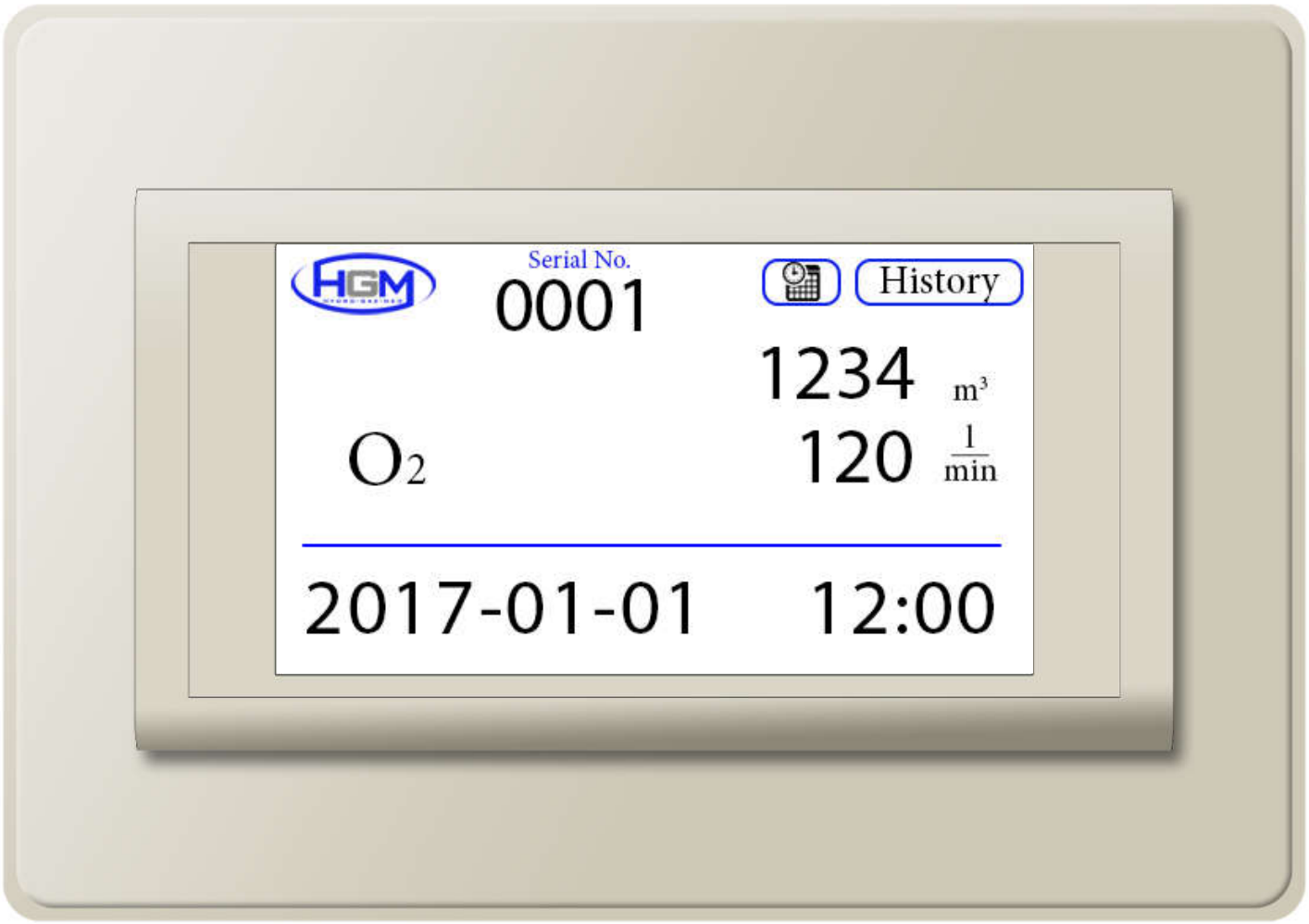
MEDICAL GAS FLOW MONITOR

according to EN ISO 7396-1:2016



Instruction manual

CE

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IMPORTANT!
PRIOR TO CONNECTING TO A POWER SOURCE ENSURE THAT FLOW SENSOR IS CONNECTED TO DEVICE!

1. General information and specification

Device is designed to measure current flow, pressure and total consumption of medical gas.

1.1. Specification

Standard	HGM	
Input	Flow sensor	**Thermal mass sensor FS7**
Output	MODBUS RTU (optional)	9600 BAUD, 8 bits, 2 bits stop, no parity control
Measuring range	Flow	0-300 l/min
	Pressure	0-16 bar
Inlet pressure	Max. 16 bar	
Air inlet	22 mm copper pipe	
Connectors	Transmission	RJ-45 or STL-1550/4-3.5
	Inlet/outlet	STL-1550/4-3.5 MC-1.5/2-5,08
Power supply	230V AC	
Power consumption	~25mA	Max. 200mA
Housing	PET	
Working temperature	5 – 50°C	
Storing temperature	-20 – 60°C	
Dimensions	Length	190 mm
	Width	145 mm
	Height	80 mm
Weight	~2 kg	

2. Function

Gas passes through flow sensor and its speed is measured and displayed as flow value. Flow is measured proportionally and displayed in liters per minute.
Device can memorize consumption of last 6 months. Total consumption can be displayed in cubic meters or in liters, this has to be determined upon order.
Precision of measurement is in range of +/- 5% within set measuring range.

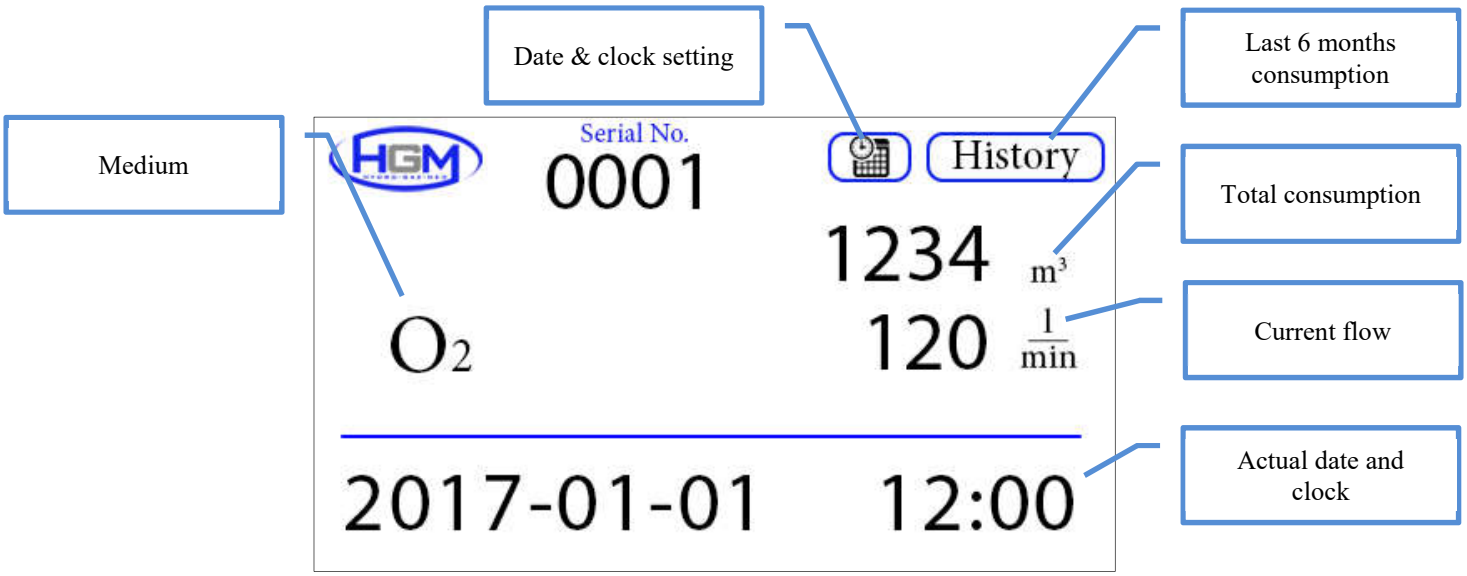
3. Construction

Device consists of:

1) flow sensor;
2) alarm unit;
3) 12V power supply;
4) 230V cable;

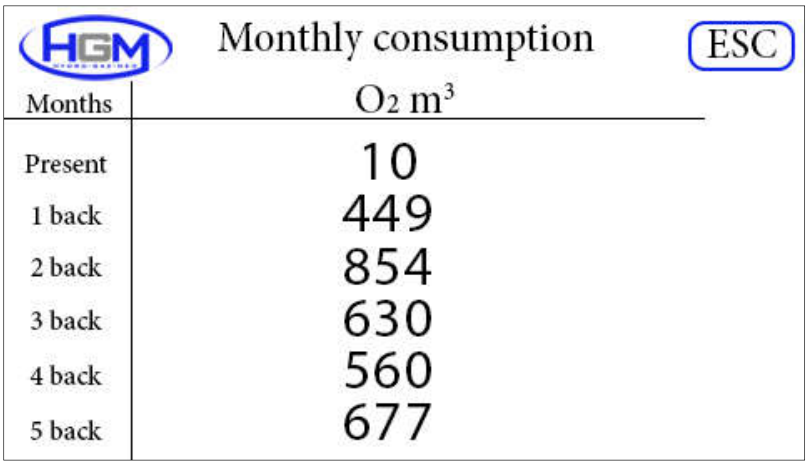
4. Screen content

4.1. Main screen



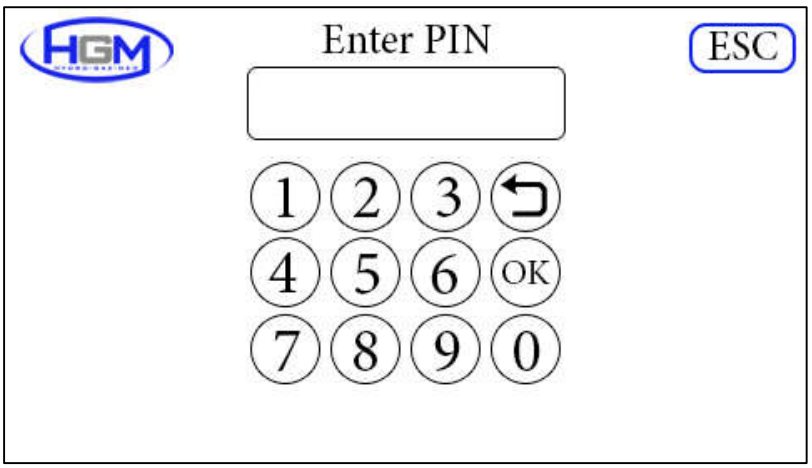
4.2. History

History screen shows total consumption of gas for past six months. Every month is measured separately. Each consumption per month is presented in cubic meters. Total consumption will count till 655 359 m3, after that it will reset itself and start from 0.



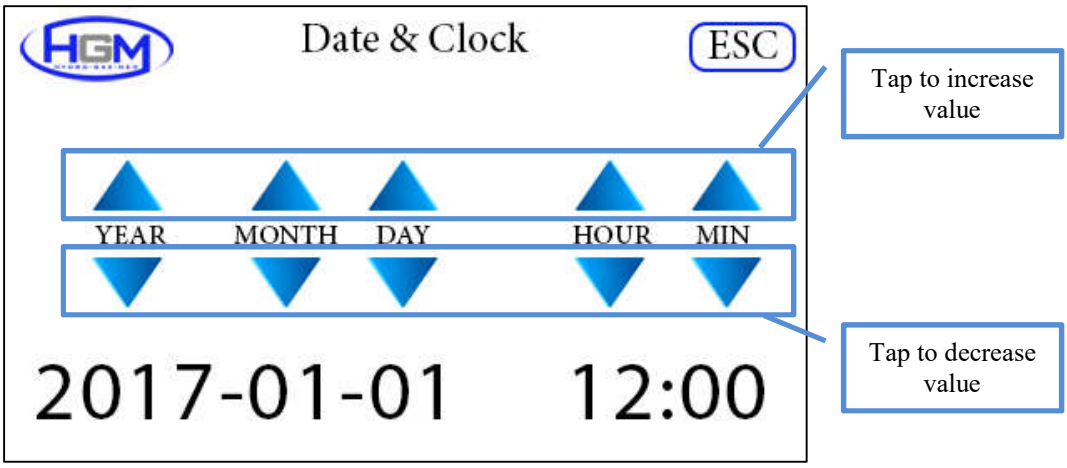
5. Date & clock settings

Date and clock can be changed according to local time if necessary. To access date and clock settings device will ask for PIN.



Enter **5287** and tap OK.

If wrong digit or code is entered, touch back arrow and re-enter PIN again, if Pin is wrong, there will be single “beep” sound.



After adjusting tap ESC to save and go to the main screen.

6. Transmitting alarm signals

Control unit is provided with RJ-45 connectors on the back (see clause 9 and 10), they allow to connect any remote alarm unit compatible with Hydro-Gaz-Med communication interface or be connected to central monitoring system installed in healthcare facility using MODBUS RTU, such converter is sold separately.

MODBUS	**DI**	**RI**	**RO**
9600 bps	0.	0. serial number	0.
Device address 200	1.	1. Flow value	1.
Base address 0	2.	2.	2.

7. Maintenance

Device is maintenance free.

8. Parts list

- 12V DC power supply - cat. No. APV-16-12
- flow sensor - cat. No. HGM-FS7

9. Authorized service

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10. Communication cable scheme

11. Wiring diagram