

**Cryosurgical unit**

***Cryo-S Electric II***

**Technical specification**



**CE 2274**

**Metrum CryoFlex**

ul. Zielna 29  
Blizne Łaszczyńskiego  
05-082 Stare Babice  
POLAND



[www.metrum.com.pl](http://www.metrum.com.pl)



[info@metrum.com.pl](mailto:info@metrum.com.pl)



+48 22 33 13 750



+48 22 33 13 766

***4. Accessories for Cryo-S Electric II***

Standard accessories of the unit include the following elements:

No.	Standard accessories	Qty
1	2-button footswitch with a cable	1
2	Cylinder-unit pneumatic hose	2
3	Flat wrench #22 and #32 (#27) (N <sub>2</sub> O and CO <sub>2</sub> )	1
4	Operating manual	1
5	Electric power cord	1
6	N <sub>2</sub> O and CO <sub>2</sub> cylinder connectors	2
7	Spare seals and seal cones	set
8	Spare fuses	2
9	Unit packaging	1
10	Socket caps (gas supply, cryoprobe)	2
11	Screw-in cryoprobe pantograph	1

Table 1. Standard accessories of the of Cryo-S Electric II device

The following can be ordered as non-standard accessories for the unit:

No.	Non-standard accessories
1	Hose for cryoprobes
2	Angular probes fixed to hose (non-sterile)
3	Detachable probes (non-sterile)
4	Angular probes fixed to hose (sterile)
5	Single-use probes
6	Detachable probes
7	Spray-type cryoprobes
8	Single-use probe adaptor
9	Fabric cylinder bag

Table 2. Non-standard accessories of Cryo-S Electric II device

## 5. Technical characteristics of Cryo-S Electric II device

POWER SUPPLY	
Power supply	100 ÷ 240V (50 / 60 Hz) AC
Maximum power consumption	150 VA
SAFETY	
Class	I
Level	B
Fuses	2 pieces Ø5x20 time-delay cut-outs 1.25A / 250V
Case IP class	IP 21
GAS SUPPLY	
Working medium	CO <sub>2</sub> or N <sub>2</sub> O
Maximum pressure	70 bars (CO <sub>2</sub> ) 55 bars (N <sub>2</sub> O)
Working pressure	48 ÷ 65 bars (CO <sub>2</sub> ) 38 ÷ 53 bars (N <sub>2</sub> O) 25 ÷ 53 bars(N <sub>2</sub> O, Spray-type)
Operation mode	AUTO MANUAL
Minimum temperature of a cryoprobe tip	about -80°C for N <sub>2</sub> O about -70°C for C <sub>2</sub> O
OTHER	
Unit dimensions	390 <sub>(W)</sub> x 420 <sub>(D)</sub> x 190 <sub>(H)</sub> mm
Weight	around 11 kg
ENVIRONMENT	
Temperature	18 – 32 °C
Relative humidity	0 -75 %
Atmospheric pressure	700 -1060 hPa

Table 3. Technical characteristics of Cryo-S Electric II with neurostimulation device

## 6. Construction and appearance of Cryo-S Electric II with neurostimulation

The case of the unit consists of a powder coated steel framework and a front panel made of formed ABS. A 7" LCD touch screen is used to operate the unit.

Description of drawings presenting the unit (Figure 1, Figure 2, Figure 3):

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. LCD screen</li> <li>2. Optional vacuum generator socket</li> <li>3. Flow rate adjustment</li> <li>4. Probe socket,</li> <li>5. RFID reader (cryoprobe identification)</li> <li>6. Speaker</li> <li>7. CO<sub>2</sub> /N<sub>2</sub>O gas connector,</li> <li>8. Footswitch socket,</li> <li>9. CO<sub>2</sub> /N<sub>2</sub>O outlet,</li> <li>10. Fuses,</li> <li>11. Main power switch,</li> <li>12. 110V - 230V~ power supply socket,</li> <li>13. Automatic / manual freezing mode icon,</li> <li>14. Freezing temperature,</li> <li>15. Probe flow rate,</li> <li>16. Device work mode (AUTO, MANUAL)</li> <li>17. Duration of the freezing and defrosting,</li> <li>18. Working mode (STOP, PREPARATION TO FREEZE, READY, FREEZING, CLEANING)</li> <li>19. Gas cylinder pressure,</li> <li>20. Cylinder icon:               <ul style="list-style-type: none"> <li>• Blue – pressure OK.,</li> <li>• Red – overpressure, empty or not connected</li> </ul> </li> <li>21. Gas type icon (CO<sub>2</sub> / N<sub>2</sub>O),</li> <li>22. "End of work" button – gas release</li> <li>23. Nominal flow of the probe</li> <li>24. Footswitch buttons (yellow and blue),</li> <li>25. Footswitch work mode icon (C, S),</li> <li>26. Description of the current footswitch functions,</li> </ol> | <ol style="list-style-type: none"> <li>27. Neurostimulation button (for devices equipped with neurostimulation only),</li> <li>28. Type of the chosen probe,</li> <li>29. Number of treatments left for the specific probe,</li> <li>30. Device settings screens.</li> </ol> |
|---|--|

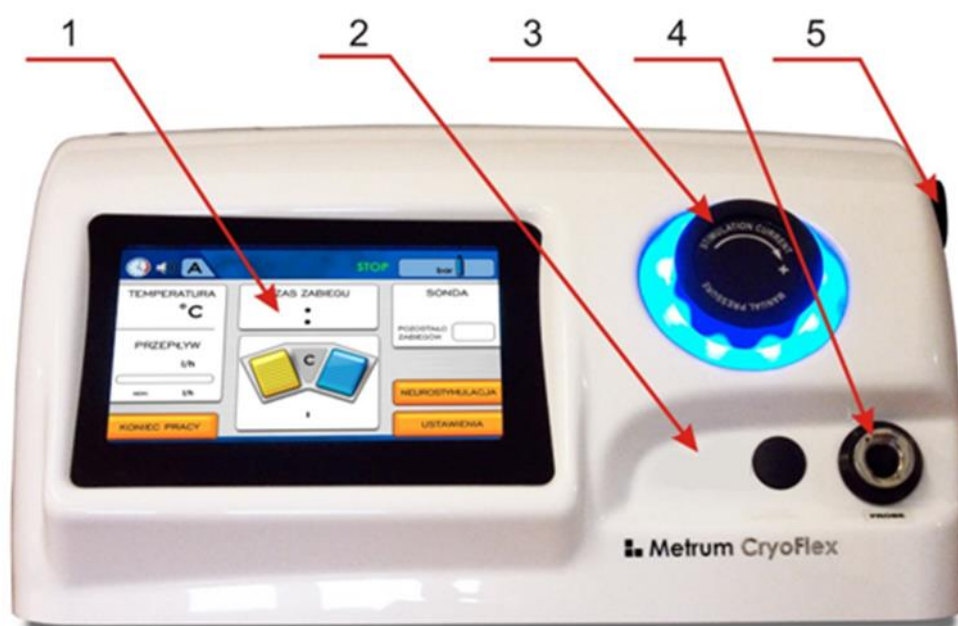


Figure 1. Front view of Cryo-S Electric II

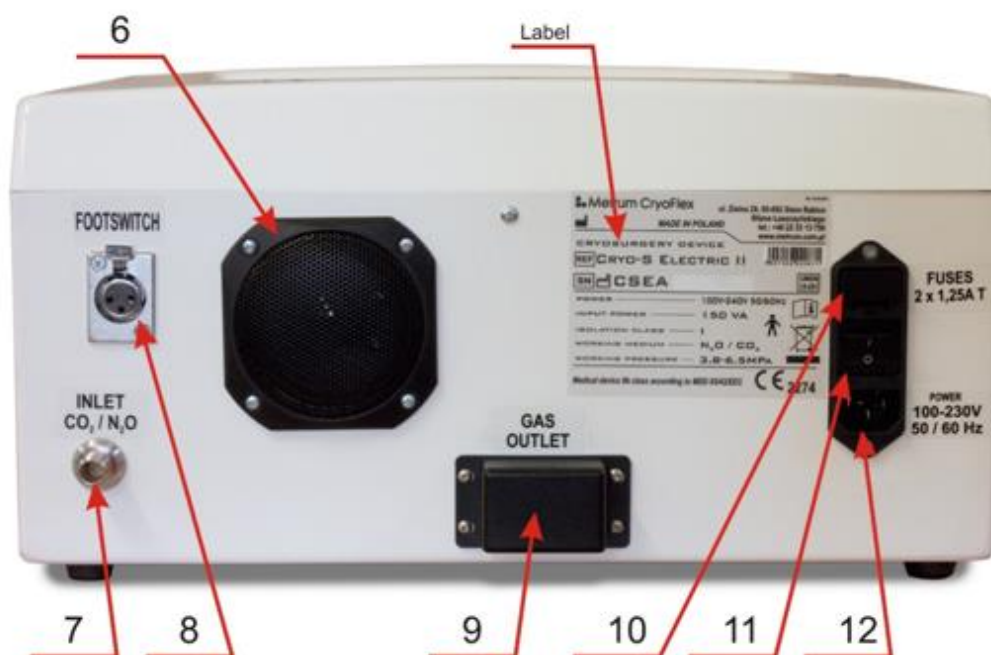


Figure 2. Rear view of the unit