

Water Treatment



HELIOS 05 Control panel



Example of HELIOS 05 panel (pH-CI with 2 pumps version)

The Control panel Helios 05 is based on user friendly approach and its maintenance can be done without technical knowledge, it is composed by two elements:

- Control instrument: Nexus 7000 is a dedicated multi-parameter controller for complex applications that require a number of chemical parameters to be checked at the same time.
- Hydraulic part: PSS-Plexi probe holder with Volumetric Flow-sensor with a range from 10 to 100 litres/hour, with external reed sensor for proper flow rate between 70 and 90 litres/hour

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Helios 05 versions



Helios 05 without pump



Helios 05 with 2 pumps



amperometric



potentiostatic

Helios 05 with 1 pump

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Resume table

Models	Range	Code
HELIOS.05 CL with 1x AT.AM 02 100÷240 Vac	0-5ppm 40w *	JH05CLCU0000
HELIOS.05 CL without pumps 100÷240 Vac	0-5ppm 20w *	JH05CLCU0S00
HELIOS.05 PC with 2x AT.AM 02 100÷240 Vac	0-14Ph 0-5ppmCl 60w *	JH05PCCU0000
HELIOS.05 PC with 2x AT.AM 04 100÷240 Vac	0-14Ph 0-5ppmCl 100w *	JH05PCAU0400
HELIOS.05 PC without pumps 100÷240 Vac	0-14Ph 0-5ppmCl 20w *	JH05PCCU0S00
HELIOS.05 PH-Potentiostatic with 2x AT.AM 02 100÷240 Vac	0-14Ph Cl/H2o2/Paa/Brome by 4/20ma input 60w	JH05PPCU0000
HELIOS.05 PH-Redox with 2x AT.AM 02 100÷240 Vac	0-14Ph/+-1500mV 60w	JH05PRCU0000
HELIOS.05 PH-Redox without pumps 100÷240 Vac	0-14Ph +/-1500mV 20w	JH05PRCU0S00
HELIOS.05 PH-Redox-CL without pumps 100÷240 Vac	0-14Ph/+-1500mV 0-5ppmCl 20w	JH05XCCUXS02
HELIOS.05 CL-Potentiostatic without pumps	Cl/H2o2/Paa/Brome by 4/20ma input 20w	JH05CPCUXS00
HELIOS.05 PH-CL Potentiostatic without pumps	0-14Ph Cl/H2o2/Paa/Brome by 4/20ma input 20w	Upon Request
HELIOS.05 PH-RX-CL Potentiostatic without pumps	0-14Ph +/-1500mV Cl/H2o2/Paa/Brome by 4/20ma input 20w	Upon Request
HELIOS.05 PH-RX- F CL -T cl Potentiostatic + Amperometric without pumps	0-14Ph +/-1500mV/ 0-5ppm amperometric free Cl, Total Pot Cl, Combined Cl	JH05YCCUXS00

* Amperometric open type chlorine sensor (copper / platinum electrode)

Measurement ranges

Code	Description	Accuracy
• ph	0 ÷ 14,00 pH	±0,01 pH
• ORP	±2000 mV	± 1 mV
• Chlorine (amp.cell)	0 ÷ 5,00 ppm	± 1 %
• Chlorine and Dioxide	0÷1/5/10/20/200,00 ppm	± 1 %
• Flow rate	0,0000÷99.999 liters/sec.	± 2 %
• Temperature	0÷100°C	± 0,2 °C

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- **NEXUS 7000**



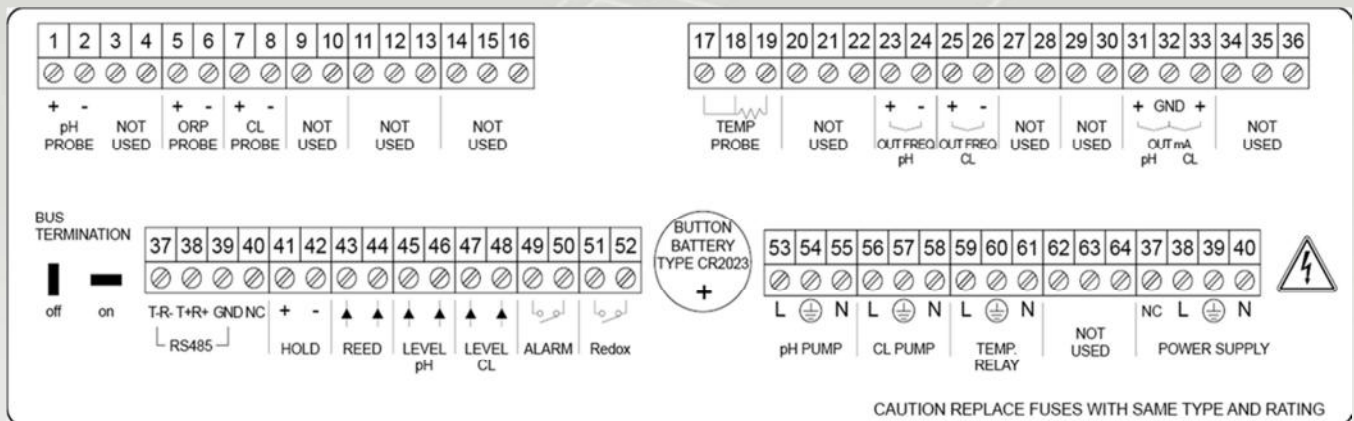
Main characteristics

- **Compact and easy to use controller, allows the measurement of the following parameters: pH / Rx, Free Chlorine, Temperature, 2 inputs for chemicals level probe.**
- **IP65 protection.**
- **2 Relays with power supply for dosing pumps.**
- **1 Dry contact relay for the alarm state.**
- **2 current outputs (4÷20 mA).**
- **2 frequency channels "open collectors".**
- **RS485 serial port with Modbus RTU communication protocol.**
- **Alphanumeric display, 4 lines and 20 characters.**
- **High measuring definition.**
- **Temperature: 0 ÷ 100°C with PT100**
- **Power supply: 100 ÷ 240 Vac 50/60 Hz**

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CONNECTION TERMINAL BLOCK



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- **PROBES**

- **PH Probe (included)**

E.ph sensor

Measurement range 2 ÷ 12 ph, temperature from up 60 °C and pressure from up 6 bar



- **Redox probe (included)**

E.Rx sensor

Measurement range ± 1000 mV, temperature from up 60 °C and pressure from up 6 bar

E.Rx AU sensor

Measurement range ± 2000 mV, temperature from up 60 °C and pressure from up 6 bar



- **Cl probe (not included)**

Cl potentiostatic probe

Measurement range 0 ÷ 200 ppm



Cl amperometric probe (copper platinum electrode)

Measurement range 0 ÷ 5 ppm

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Modular probe holder



The principle of patented modularity consists in elements assembled with metallic tie rods and metal

The Probe Holder is based on user friendly approach, can be selected and its maintenance can be done



Feedback Flow rate value thanks to magnetic red float with external reed sensor for proper flow rate between

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ATHENA AM2 /AM4

- **ANALOGIC WITH PROPORTIONAL FLOW**

- To a digital signal (water meter) with the possibility to multiply or divide the impulses received
- To an analogic signal (4÷20 mA) with the possibility to regulate in percentage the maximum flow
- 0÷100 % manual flow regulation



PERFORMANCES TEST HAS BEEN DONE AT ROOM TEMPERATURE, WITH WATER, AT 1,5 mt SUCTION HEIGHT

FLOW RATES	PRESSURES	CC/IMP.	CONNECTIONS	STROKES/MIN.	CONSUMPTION	WEIGHT	Athena 2
3 l/h	12 bar	0,31	4x6	160	20 watt	3 kg	
4 l/h	10 bar	0,42	4x6	160	20 watt	3 kg	
5 l/h	8 bar	0,52	4x6	160	20 watt	3 kg	
8 l/h	2 bar	0,83	4x6	160	20 watt	3 kg	Athena 4
30 l/h	5 bar	1,67	8x12	300	40 watt	4 kg	
40 l/h	4 bar	2,22	8x12	300	40 watt	4 kg	
55 l/h	2 bar	3,05	8x12	300	40 watt	4 kg	
110 l/h	0,1 bar	6,11	8x12	300	40 watt	4 kg	

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- **Filter (included)**

Included, mounted on the panel, with Mini polypropylene washable cartridge 5" 80 micron



Main applications

- **Swimming pool** amperometric probe (copper platinum electrode) recommended
- **Water treatment** potentiostatic probe (membrane type) recommended.
- **Potable water** potentiostatic probe (membrane type) recommended.

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Installation panel kit



1- PVC tube (2m)

2- Floating level probe

3- Floating level probe support

4- Probe holder adapter

5- Probe holder adapter

6- Glass balls (only for amperometric panel kit)

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Athena installation kit



1- PE Tube (2m)

2- PVC Tube (4m)

3- Level sensor connector

4- Screws and mounting bracket

5- Nut

6- Tube adapter

7- Injection valve

8- Foot filter with non return