

#### **CHARACTERISTICS**

- Free Chlorine Measure
- pH Measure
- Temperature Measure
- Relay Output for Chlorine and pH regulation
- Current outputs (opzional)
- Test functions on relays and on the analog output
- Supply 115 / 230Vac 50Hz
- ➤ Electronic stage IP65
- Remote Hydraulic stage with respect to Electronic Unit

#### **APPLICATIONS**

- ✓ Generic water treatment
- ✓ Industial water treatement
- ✓ Swimming Pool water treatment

The instrument CL30 is a multi-parametric analyzer of free Chlorine, of pH and of temperature. It is a microprocessor driven equipment and it is ha san alphanumeric display and thus it allows an intuitive and immediate setup procedure. Moreover, due to a large back-illuminated display, the visualization of the measure results visible from large distances in both well illuminated and scarcely illuminated areas. The electronics of **CL30** is remote with respect to the hydraulic equipment up to 50m by means of a common three-wire low voltage cable. This flexibility permits to collocate the electronic stage nearby to the command electric panels saving on electrical connections and it permits to collocate the electronic equipment in safer points whereas the hydraulic equipments is exposed to extreme humidity as well as very high/low temperatures. The **CL30** uses the "open light" photometric cell system for the free chlorine measure which allows to guarantee an almost perfect linearity and repeatability also for high chlorine concentrations. The pH measure is performed by an electrode in mono-tube glass (EG100) and it is thermally compensated by means of an NTC sensor. The instrument is equipped with two different set points for free Chlorine and one for the pH measure; for each set point it is possible to set On and Off values in order to set the working procedure as well as the set point hysteresis. It is present also a cumulative allarm relay which regards: set point timeout, lack of analyzed water, end of reagent, dirty cell and burnt led. Optionally it is possible to have a module consisting of four current outputs galvanically separated for measures repeating, a serial module RS485 for network connection to an host, a measure module for combined Chlorine. The instrument supply can be switched from 230Vac to 115Vac by setting up some jumpers located internally to the case.

### **Characteristics of free Chlorine meter**

Measure principle	One—Ray Photometric
Reaction type	DPD Photometric Reaction
Reagent Dosimetric System	Multichannel Peristaltic Pump
Measure Cell	"Open Light" — Realized with plexiglass
Emitter	Narrow Peak Led 515nm
Sensor	Photobattery compliant to ROHS normative
Measure Field	0.00÷5.00 ppm free Chlorine (Cl2)
Resolution	± 0.01 ppm Cl2
Accuracy	± 2% measured value
Repeatability	98%
Analysis Timing	Programmable, from 2 min to 30 min (max), steps of 1 min.



# **Characteristics of pH meter**

Measure principle	Potentiometric
Measure Field	0.00÷14.00 pH
Conducibilità Resolution	± 0.01pH
Accuracy	± 1% of measured value
Repeatability	98%
OFF-SET Correction	± 2 pH units (±110mV)
Asymmetry Correction	45 ÷ 70 mV/pH
Input Impedance	10 GOhm
Polarization Current	< 1 pA
Cal i brati on	By software on 2 points
Compensation Range	0 ÷ 100°C

# **Characteristics of Temperature Meter**

Measure principle	Termoresistive
Sensor	NTC
Measure Field	0.0÷50.0°C
Conducibilità Resolution	± 0.1°C
Accuracy	± 1% F.S.
Repeatability	99%

# **Characteristics of Electronics**

Vi sual i zati on	Display 2x16 Characters alphanumeric back— illuminated    Output
Programming keyboard	4 function keys with tactile sensation
Digital Outputs	# 2 Relay ON/OFF for free Chlorine # 1 Relay ON/OFF for pH (max power 1A 230Vac resistive load)
Allarm output	# 1 Relay ON/OFF cumulative (max power 1A 230Vac resistive load)
Digital input	Nr. 1 Active for dosage disabilitation
Leak of water	Half scale of thermal sensor
Operation temperature	5 ÷ 55°C umidity 95° non condensed
Suppl y	115V/230V — 50Hz (Manual Set Up)
Fuse	330mA-Rit (type 5x20mm)
Absorption	10 VA Max to 230Vac



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# **Characteristics of Hydraulics**

Hydraulics Support	Inox with anti—acid painting
Electronic connection cable	Three—wire cable, 3x0.5mm, supplied 5m long, max
	distance 50m
Water network connection	Female connection, 1/4" Gas
Drai n	Gravity, tube PVC-DN25
	Analysis and measure drain can be separated
Flux regulation	Automatic in the range of 0.2÷1.0 Atm
Reagent Fill Up	Manual, by acting on the proper button
Analysis liquid temperature	15 ÷ 40°C
Operating Temperature	10 ÷ 45°C

# **Characteristics of Case**

Fi xi ng	Wall
Di mensi ons	215 x 210 x 100 mm
wxhxd	
Case	White Plastic with smoking
Descri pti on	gray door
<b>Protection</b>	IP65
Weight	0.5Kg

## **Characteristics of Hydraulics Case**

Fi xi ng	Wall
Di mensi ons	300 x 400 x 150 mm
wxhxd	

# Reagents

DPD\_CLB Reagent KITs for free Chlorine

Composed by 2 bottles 1000ml (DPD1\_R + DPD2\_BL)

DPD3\_BC Reagent for combined Chlorine Combinato

Bottle 1000ml

## **Opzionals**

CL30 MA

Module for 4 current outputs 0-20mA / 4-20mA for remote control links, recorders, dosimetric systems, etc...

CL30\_485

Serial Module RS485 for network connections (single point or multipoint) with Host system for measure acquisition, instrument settino, real—time analyzer state monitoring, etc...

CL30 C

Combined Chlorine measure implementation.