

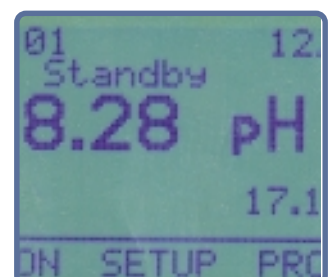


D I G I T A L I n s t r u m e n t s



L DIGITAL SERIES

*LDPH * LDRH * LDCL * LDCD * LDTORB*



D I G I T A L I N S T R U M E N T

L D D I G I T A L S E R I E S

LD Digital Series are based on microprocessor technology providing reliable and accurate measurement of **pH**, **Redox (ORP)**, **Residual Chlorine**, **Turbidity** and **Conductivity**. LD Digital Series is the ideal partner to manage sophisticated chemical treatment programs.

The fields of applications are numerous:

- wastewater treatment
- drinking water
- cooling towers
- boilers
- chemical industry
- swimming pools
- drinks and food industry
- power plants
- process industry
- paper industry
- pharmaceutical industry
- agriculture
- laboratories



LD Series controllers have two functioning modes:

LDPH

Microprocessor digital **pH** controller with automatic temperature compensation and hysteresis control.

LDPH offers On/Off and Digital Proportional operating modes.

LDCL

Microprocessor digital **Residual Chlorine (Cl₂)** controller with hysteresis control. The instrument allows to select from A.T.A. wide range of amperometric cells. It is possible to measure free or total chlorine by using the proper amperometric cell.

On/Off and Digital Proportional operating modes.

LDRH

Microprocessor digital **Redox (ORP)** controller with hysteresis control.

LDRH offers On/Off and Digital Proportional operating modes.

LDCE

Microprocessor digital **Conductivity** autoranging controller with automatic temperature compensation.

The compensation factor is user selectable in the range 0.0 ÷ 5.0.

The instrument allows to select the conductivity probe and features hysteresis control. On/Off and Digital Proportional operating modes.

LDTORB

Microprocessor digital **Turbidity** controller. Hysteresis control.

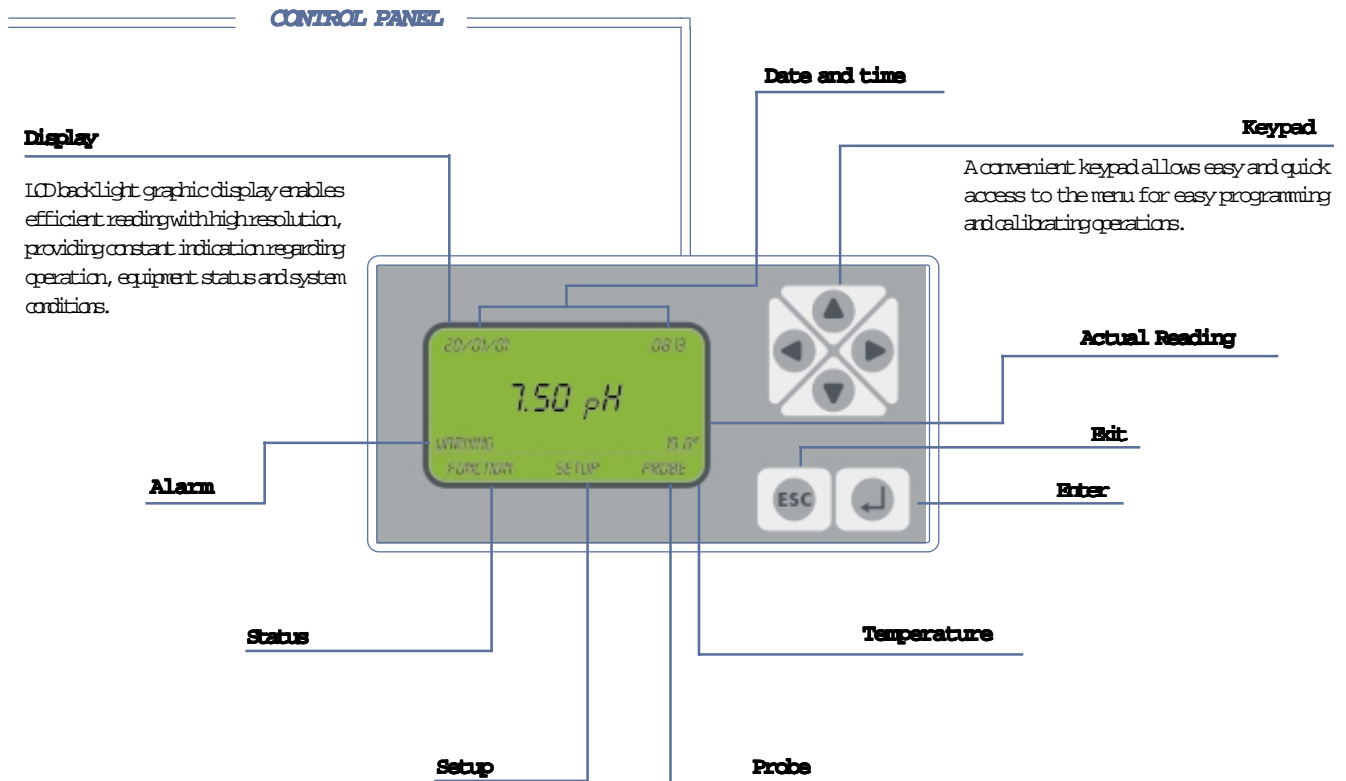
LDTORB works with A.T.A. turbidity cell mod. ETORB.

On/Off and Digital Proportional operating modes.

On/Off mode: To be connected to A.T.A. dosing pumps models CO, CL or MAN, or any other On/Off working equipment.

Digital Proportional mode: To be connected to A.T.A. dosing pump models IS or EXT or any other equipment suitable to receive external digital pulses.

GENERAL FEATURES



PROTECTION

Meets **IP65**.

QUALITY MARKINGS

ID Digital instruments are **CE** marked.

PRINTER

Serial port for **printer** allows *log print*.

CONFIGURATION

Installation is *easy and quick*.

DESIGN

Compact design and four fixing point ensure easy wall mounting or installation in control panels.



ACCESSORIES

A.T.A. offers a wide range of electrodes to match technical requirements of different applications.

CALIBRATION

Easy probe calibration to the controller. By means of buffer solutions the calibration is reliable and quick.

MAX DOSING TIME ALARM

This safety feature is activated when a set point output is on for a time longer than the set time. It is meant to avoid excessive feeds.

DELAY

This safety function delays the activation of dosing pump or any equipment driven by the controller after start-up or during stand-by mode.

STAND-BY

Instruments are provided of stand-by input when the electrode cell is running without water.

TECHNICAL DATA of ALL MODELS

Functions	LD PH	LD RH	LD CL	LD CD	LD TORB
Range	0 ÷ 14.00 pH	-1000 ÷ +1000 mV	0 ÷ 30.00 mg/Cl ₂	0 ÷ 300.0 mS	0 ÷ 30.00 NTU 0 ÷ 300.0 NTU
Resolution	± 0.01 pH	± 1 mV	± 0.01 mg/Cl ₂	± 0.01 mS	± 0.01 NTU ± 0.1 NTU
Display	LCD Backlight Graphic Display				
Controls	Digital Keyboard				
Calibration	Manual				
Environment Working Temperature	0°C to 50°C - 0% to 95% (non condensing) relative humidity				
Set Points	Two On/Off Set Points, two digital proportional				
Control Inputs	Chemical Tank Level Control, Stand-by*				
Input Impedance	> 10 ¹² Ohm	> 1G Ohm	1,5k Ohm	--	--
Relay Output (On-Off)	2 Voltage Output				
Alarm **	Max dosing time alarm / Voltage Free Contact Relay (Fuse Protected)				
Delay***	Programmable "Power-on" Delay				
Max Resistive Load	5A - 220 VAC				
Power Supply	Universal 190 ÷ 240 VAC ; 50/60 Hz				
Power Consumption	Average 10W				
Fuse	Output, instrument and alarm fuse protections				
Backup Data	YES				
Galvanic Isolation	YES (current output/temperature measurement) 0/4 ÷ 20 mA				
Probe Cleaning Output	YES				
Casing Material	ABS - IP65 box				
Mounting	WALL				
Dimensions	225 x 215 x 110 mm				
Net Weight	1,2 kg				
Serial port for printer	RS232				
Temperature Compensation	Automatic 0 ÷ 100 °C	NO	NO	Automatic 0 ÷ 100 °C	NO
Temperature Measurement	YES	YES	YES	YES	NO
Probe Selection	NO	NO	YES	YES	NO

***Stand-by:** when the electrode cell is running without water, the controller goes in stand-by mode and the outputs are disabled.

****Alarm:** to prevent over-feeding of chemicals in the system.

*****Delay:** delays the activation of dosing pump or any equipment driven by the controller after start-up or during stand-by mode.