

D3000 controllers

DPH 3000 • DRH 3000 • DCL 3000 • DCD 3000 • DO₂ 3000



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D3000 controllers

Digital instruments D3000 series

D3000 Digital Instruments Series are based on microprocessor technology providing reliable and accurate measurement of **pH, ORP, Free Chlorine, Total Chlorine, Chlorine Dioxide, Ozone, Hydrogen Peroxide, Bromine, Peracetic Acid and Conductivity**.

D3000 controllers are the ideal partners to manage sophisticated chemical treatment programs.

The fields of applications are numerous:

- Waste water treatment
- Drinking water
- Cooling towers
- Boilers
- Chemical industry
- Swimming pools
- Drinks and food industry
- Power plants
- Process industry
- Paper industry
- Pharmaceutical industry
- Agriculture
- Laboratories...

Two functioning modes

On/Off mode

In On/Off mode, the controllers can be used with the LMI, G™, mROY® and MAXROY® dosing pumps.

Digital Proportional mode

In digital proportional mode, the controllers can be used with the LMI and G™ (equipped with a VARIPULSE®) dosing pumps.

The range

DPH 3000

Microprocessor digital **pH** controller with automatic temperature compensation. DPH 3000 offers the possibility to select On/Off and Digital Proportional operating modes.

DCL 3000

Microprocessor digital **Free Chlorine, Total Chlorine, Chlorine Dioxide, Hydrogen Peroxide, Ozone, Bromine and Peracetic Acid** controller. The instrument allows to select an amperometric cell from a wide range of sensors. DCL 3000 offers the possibility to select On/Off and Digital Proportional operating modes.

DRH 3000

Microprocessor digital **ORP** controller. DRH 3000 offers the possibility to select On/Off and Digital Proportional operating modes.

DCD 3000

Microprocessor digital **Conductivity** 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. DCD 3000 offers the possibility to select On/Off and Digital Proportional operating modes.

DO₂ 3000

Microprocessor digital **O₂** controller with automatic temperature compensation. DO₂ 3000 offers the possibility to select On/Off and Digital Proportional operating modes.

General characteristics

Control panel

DISPLAY

LCD backlight graphic display enables efficient reading with high resolution, providing constant indication regarding operation, equipment status and system conditions.

ACTUAL READING

ALARM

STATUS

DATE AND TIME

KEYPAD

A convenient keypad allows easy and quick access to the menu for easy programming and calibrating operations.

TEMPERATURE

ENTER

EXIT

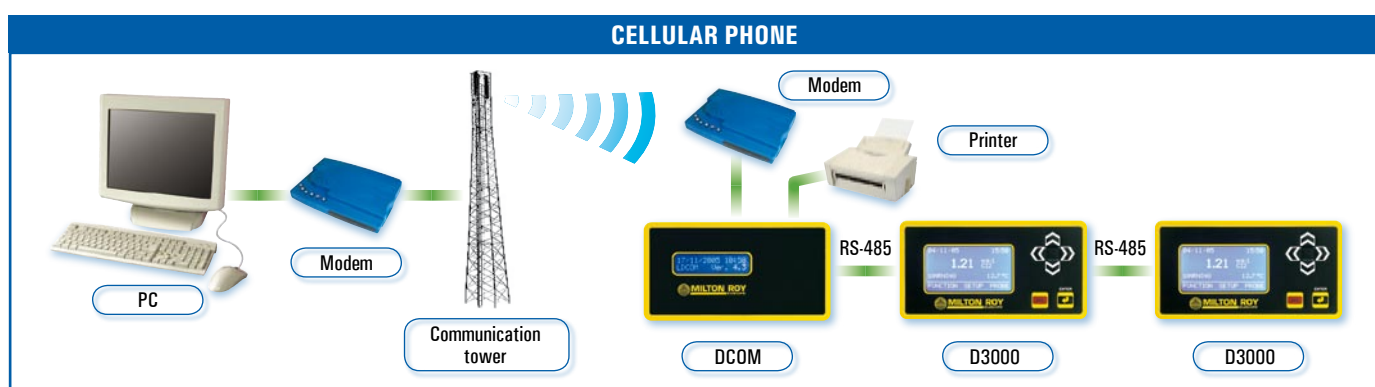
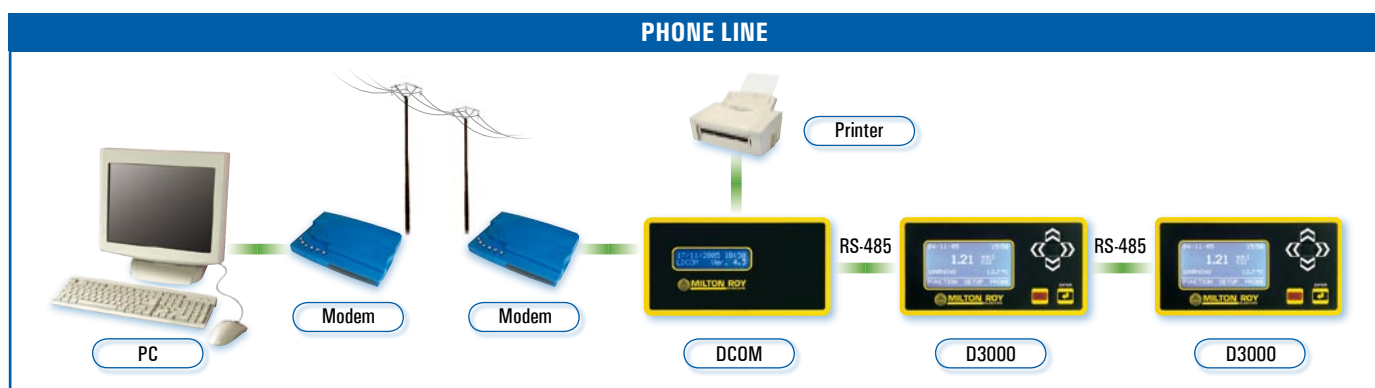
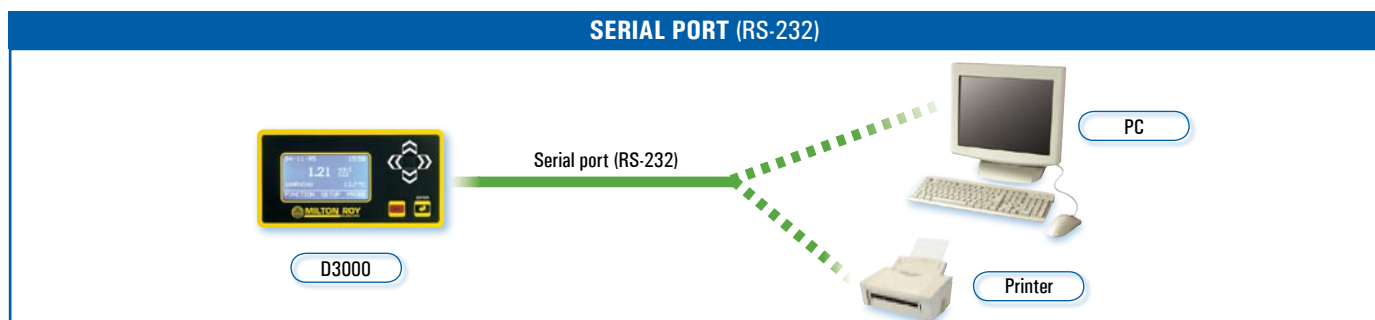
SETUP

PROBE



Remote control

D3000 series instruments, when connected to a modem, to PSTN line or to a GSM, allow remote control of a dosing system and sending of **SMS alarm messages** up to 9 telephone numbers.



Casing material

IP65 protection.

Design

Compact design and four fixing points ensure solid and secure wall mounting.

Accessories

A wide range of electrodes to match technical requirements of different applications is available.

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 allows to avoid excessive feeds.

Communication

Serial ports RS232 or RS485 allow communication between: controller, DCOM, modem, PC, GSM and printer.

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.

Configuration

Installation is easy and quick.

Calibration

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

Stand-by

Instruments are provided of stand-by input to stop the injection of chemical when the electrode cell is running without water or when the level in the reagent tank is low.

Technical characteristics

Functions	DPH 3000	DRH 3000	DCL 3000	DCD 3000	DO ₂ 3000
Range	0 ÷ 14.00 pH	-1000 ÷ +1000 mV	0 ÷ 1.000 mg/l Cl ₂ 0 ÷ 2.000 mg/l Cl ₂ 0 ÷ 5.00 mg/l Cl ₂ 0 ÷ 10.00 mg/l Cl ₂ 0 ÷ 20.00 mg/l Cl ₂ 0 ÷ 200.0 mg/l Cl ₂ 0 ÷ 2000 mg/l Cl ₂	0 ÷ 300.0 µS 0 ÷ 3.000 µS K=0.1 0 ÷ 3.000 mS 0 ÷ 30.00 mS K=1 0 ÷ 30.00 mS 0 ÷ 300.0 mS K=10	0 ÷ 60 mg/l O ₂
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 set points				
Control Inputs	Control of chemical tank level and flow rate in the electrode holder, Stand-by*				
Input Impedance	> 10 ¹² Ohm	> 1 GOhm	1.5 kOhm
Relay Outputs (On-Off)	2 Voltage Outputs				
Proportional Outputs (On-Off)	2 Impulse Outputs				
Alarm**	Max dosing time alarm / Voltage Free Contact Relay (Fuse Protected)				
Delay***	Programmable "Power-on" Delay				
Max Resistive Load	5 A - 220 VAC				
Power Supply	Universal 90 ÷ 240 VAC ; 50/60 Hz				
Power Consumption	Average 10 W				
Fuse	Output, instrument and alarm fuse protections				
Back up 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 or modem	RS232				
Network Connection	RS485				
Temperature Compensation	Auto: PT100 0 ÷ 100 °C	NO	NO	Auto: PT100 0 ÷ 100 °C	YES
Temperature Measurement	YES	YES	YES	YES	YES
Probe Selection	NO	NO	YES	YES	NO

***Stand-by:** when the controller goes in stand-by mode, 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.



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To find your local representative, visit our website:

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D3000 controllers - Ref. 160 7401 101N - 06/07 - Rev. A

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