

Digital controllers for pH neutralization with temperature reading (° C or ° F).

An accurate design has allowed to build on a series of instrument easy to program. LDSPN PLUS series are controlled by an "ENCODER".

Impulsive proportional working mode.

Instruments connected in a network (up to 31 instruments) can be remotely controlled. Combined with probes and probe holders, they can be assembled on panels to have a complete turnkey control system.



#### REMOTE CONTROL

Remote control is available with ETHERNET or GSM/GPRS configurations.  
Remote control via: [www.ermes-server.com](http://www.ermes-server.com).

#### MODBUS

Modbus is a serial communication protocol for connecting instruments to other devices on RS485 network.

#### SOFTWARE

English and French software available.

#### CUSTOMIZATION

Instruments can be customized with client logo on frontal panel.

#### STAND-BY INPUT

#### PERMANENT DATA STORAGE (WITHOUT BATTERY)

System log on display.

#### AUTOMATIC TEMPERATURE COMPENSATION

With PT100 temperature probe.

#### ALARMS

Alarms for: damaged probe; max dosage, flow, threshold, level.

#### DISPLAY

Probe reading, alarms notification, network status (Ethernet; USB, GSM/GPRS) are shown on display.

#### PROBE READOUT MENU

#### mA OUTPUT

As option.

#### ALARM RELAIS

230 VAC output alarm.

#### DOUBLE SETPOINT

Relais set for 2 setpoint.

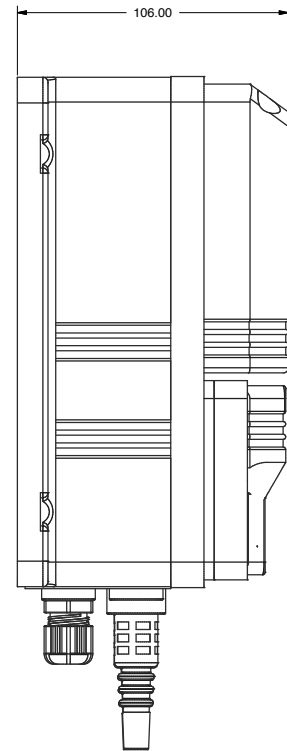
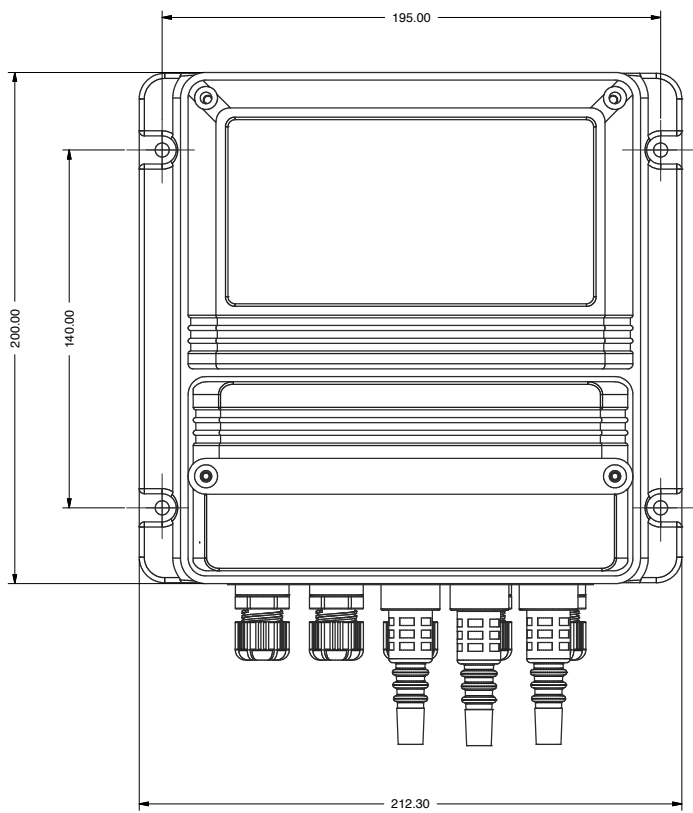
#### INLET SOLENOID VALVE

#### OUTLET SOLENOID VALVE

#### MIXER CONTROL SOLENOID VALVE

#### DOUBLE TIMER FOR SET-POINT ACTIVATION DELAY

## DIMENSIONS



## LDSPN PLUS

LDSPN PLUS	
MEASURING PARAMETER	pH
RANGE	0-14 pH; resolution: 0,01
TEMPERATURE COMPENSATION	PT100
INPUT SIGNAL	PCB
POWER SUPPLY	85-264 VAC; 50/60 Hz
AVERAGE CONSUMPTION	25 W
ON/OFF OUTPUT	2 relays; 5A @ 230 VAC (fuse protected)
ALARM OUTPUT	85-264VAC alarm output
INPUT	Stand-by High / Low level tank Acid / alkali level External cycle start command
OUTPUT	2 Opto coupled output (acid / alkali pumps) 1 alarm relay 1 relay output for inlet solenoid valve 1 relay output for outlet solenoid valve
ENVIRONMENT TEMPERATURE	-10°C ... 50°C (14°F ... 122°F) / 0-95% (non condensing) relative humidity
PROTECTION	IP65 - % working UR: 85% with $\leq 40$ °C; 70% at 50 °C (non condensing)
POLLUTION LEVEL	2
ENCLOSURE	ABS
TEST/CERTIFICATION	CE
DIMENSIONS	refer to the drawing
WEIGHT	1,45 kg (3.1967 lb)
INSTALLATION	vertical wall (4 fixing holes)
OPTIONS <sup>1</sup>	<ul style="list-style-type: none"> <li>• mA output</li> <li>• 9-30 VDC power supply</li> <li>• ADVANCED USB configuration <sup>2</sup></li> <li>• ETHERNET configuration <sup>2</sup></li> <li>• GSM/GPRS configuration <sup>2</sup></li> </ul>

<sup>1</sup> On request

<sup>2</sup> For configuration features refer to the table at the end of the document.

## CONFIGURATIONS

<b>INSTRUMENT Configuration</b>	<b>PLUS</b>	<b>WHEN</b>	<b>REQUIREMENTS</b>	<b>FUNCTION</b>
<b>BASIC (standard)</b>	/	For local control only	/	RS485 output to link other EMEC instruments or a PC
<b>ADVANCED USB</b>	USB output	You do not need a PC on your plant: you can download data log on a USB device	/	RS485 output to link other EMEC instruments or a PC Data Log on USB device
<b>ETHERNET</b>	LAN network between instrument and web	Remote control via WEB ERMES	LAN wiring (RJ-45)	RS485 output to link other EMEC instruments or a PC Web ERMES remote control (PC, smartphone or tablet) Alarm messages via email
<b>GSM/GPRS</b>	GPRS modem between instrument and web	Remote control via WEB ERMES	Network coverage	RS485 output to link other EMEC instruments or a PC Web ERMES remote control (PC, smartphone or tablet) Alarm messages via email Alarm messages via SMS