LDSPN PLUS | DIGITAL CONTROLLERS
FOR PH NEUTRALIZATION WITH TEMPERATURE

imsystem
Technologies for Automation

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.

ERMES

REMOTE CONTROL
Remote control is available with ETHERNET or GSM/GPRS configurations.
Remote control via: 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
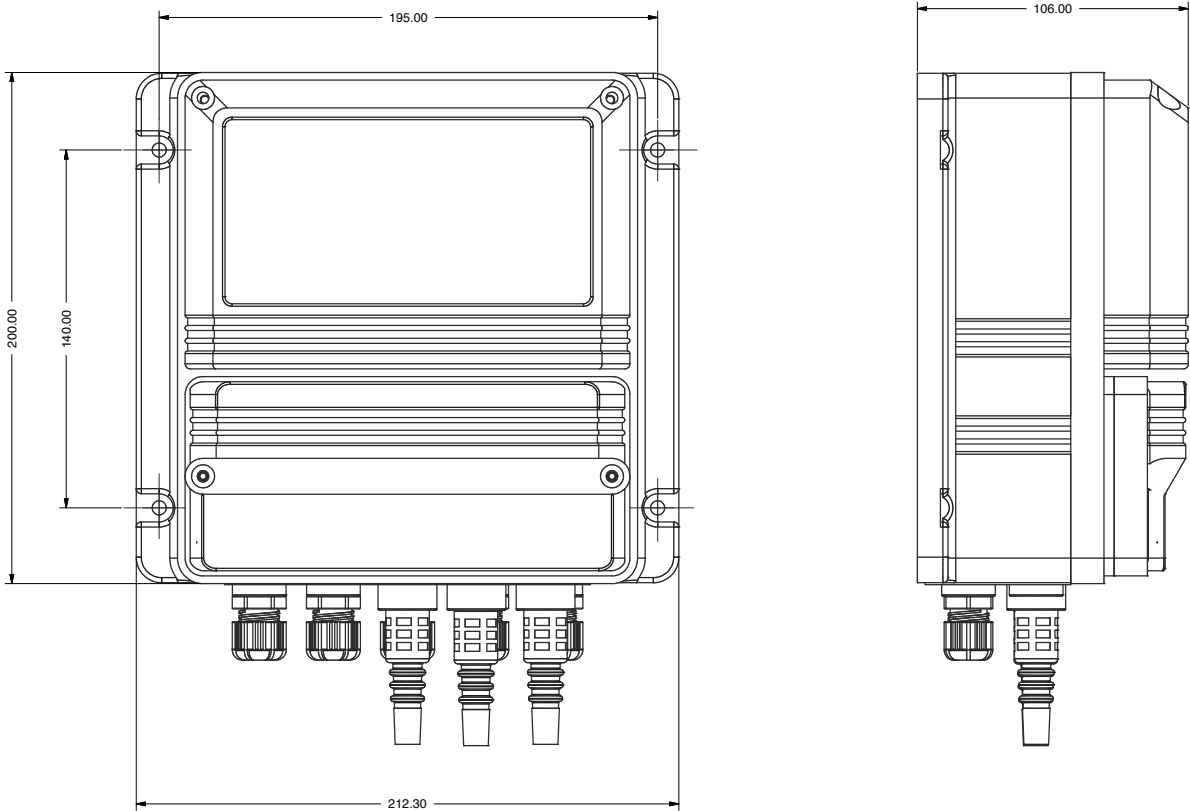230 VAC output alarm.

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
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 ≤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 [1]	• mA output • 9-30 VDC power supply • ADVANCED USB configuration [2] • ETHERNET configuration [2] • GSM/GPRS configuration [2]

[1] On request
[2] For configuration features refer to the table at the end of the document.

CONFIGURATIONS

INSTRUMENT Configuration	PLUS	WHEN	REQUIREMENTS	FUNCTION
BASIC (standard)	/	For local control only	/	RS485 output to link other instruments or a PC
ADVANCED USB	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 instruments or a PC Data Log on USB device
ETHERNET	LAN network between instrument and web	Remote control via WEB ERMES	LAN wiring (RJ-45)	RS485 output to link other instruments or a PC Web ERMES remote control (PC, smartphone or tablet) Alarm messages via email
GSM/GPRS	GPRS modem between instrument and web	Remote control via WEB ERMES	Network coverage	RS485 output to link other instruments or a PC Web ERMES remote control (PC, smartphone or tablet) Alarm messages via email Alarm messages via SMS