LDS - LDS PLUS

Data Sheet

SINGLE READING DIGITAL SYSTEM

Digital controllers for measurement and control of a single parameter, with temperature reading (° C or ° F).

An accurate design has allowed to build on a series of instrument easy to program.
LDS and LDS PLUS series are controlled by an "ENCODER".
Working mode can be set:

- on / off
- pulse proportional *
- proportional PWM *
- fixed PWM *
- PID (only on LDS PLUS).

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.

* not on LDSTORBH.



REMOTE CONTROL
Remote control is available with ETHERNET or GSM/GPRS configurations.
Remote control via: www.ermes-server.com.

SOFTWARE
English and French software available. Ask for Deutsch.

CUSTOMIZATION
Instruments can be customized with client logo on frontal panel.

STAND-BY AND FLOW CONTROL INPUT

PERMANENT DATA STORAGE (WITHOUT BATTERY)
System log on display.

AUTOMATIC TEMPERATURE COMPENSATION
With PT100 temperature probe.

DELAY
Programmable delay at dosing start-up (up to 60 minutes).

ALARMS
Alarms for: damaged probe; max dosage, flow, threshold, level (double level on LDS PLUS).

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

PROBE READOUT MENU

mA OUTPUT
As option.

ONLY FOR LDS PLUS

PROBE CLEANING
To obtain reliable results it is possible to connect a cleaning system, for example a probe cleaning system.

CIRCULATION PUMP
This function allows to supply a water circulation pump into the intake pipeline, increasing pressure.

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

mA WATER METER INPUT
As option.

ALARM RELAIS
230 VAC output alarm.

DOUBLE SETPOINT
Relais set for 2 setpoint.

mA OUTPUT

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Specifications subject to change without notice | R11-19

emec SIMPLE AS WATER

qualityaustria SYSTEM CERTIFIED
ISO 9001:2015
ISO 14001:2015
BS OHSAS 18001:2007

LDS - LDS PLUS

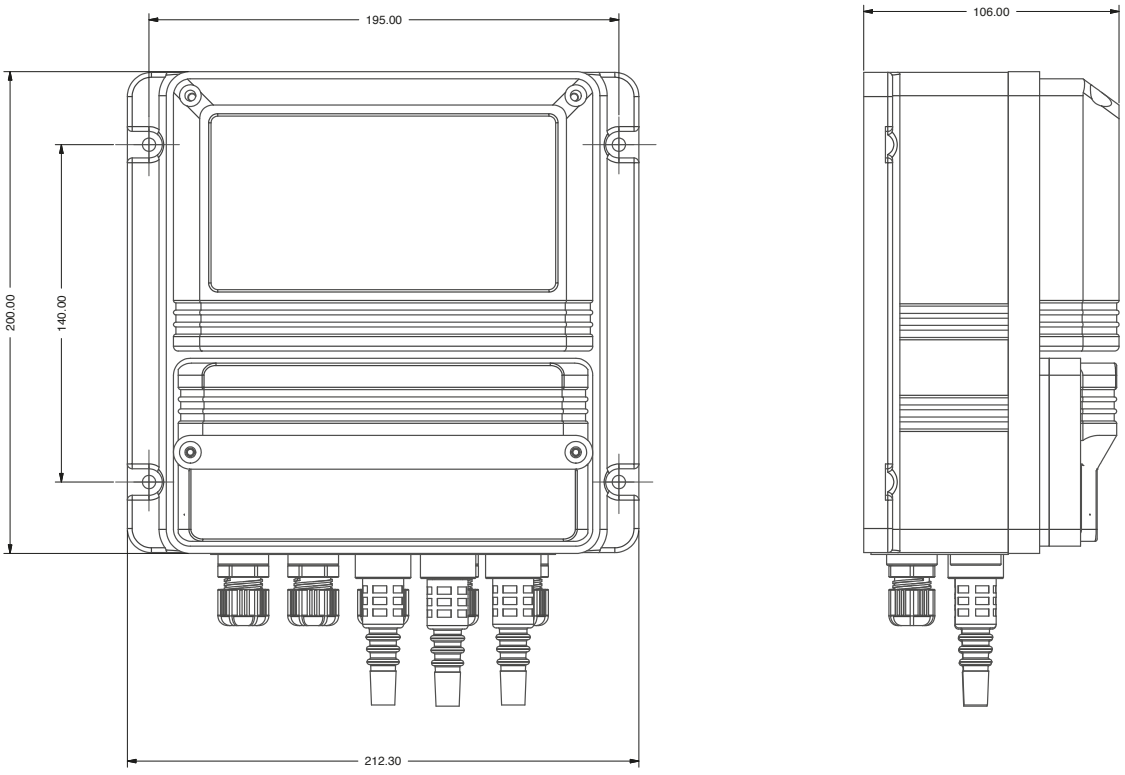
Data Sheet

SINGLE READING DIGITAL SYSTEM

MODELS

STANDARD	PLUS	PARAMETER
LDSPH	**LDSPH PLUS**	pH
LDSRH	**LDSRH PLUS**	ORP
LDSCL	**LDSCL PLUS**	Chlorine (chlorine measure based on the probe)
LDSCD	**LDSCD PLUS**	Conductivity
LDSCDIND	**LDSCDIND PLUS**	Inductive conductivity (ECDINDPT probe)
LDSTORBH	**LDSTORBH PLUS**	Turbidity (ETORBH probe)
LDSTORB	**LDSTORB PLUS**	Turbidity (ETORB probe)
LDSDO	**LDSDO PLUS**	Dissolved Oxygen (EOLUM probe)
LDSTRC	**LDSTRC PLUS**	Tracers (ETRC probe)

DIMENSIONS mm



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IQNet CERTIFIED MANAGEMENT SYSTEM
Qualityaustria SYSTEM CERTIFIED
ISO 9001:2015
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BS OHSAS 18001:2007

LDSDO - LDSDO PLUS

	LDSDO	LDSDO PLUS
MEASURING PARAMETER	Dissolved oxygen with temperature reading (°C or °F)	
RANGE	0 - 9,999 mg/l O_2 0 - 99,99 mg/l O_2 0 - 999,9 mg/l O_2 0 - 9999 mg/l O_2	
TEMPERATURE COMPENSATION	PT100	
CONTROL	/	PID
INPUT SIGNAL	PCB	
POWER SUPPLY	240VAC 50/60Hz ; 12 or 24VDC (specify on order)	
AVERAGE CONSUMPTION	25 W	
ON/OFF OUTPUT	2 relays; 5A @ 230 VAC (fuse protected)	
ALARM OUTPUT	(same as power supply) alarm output	
INPUT	Stand-by Flow Dissolved oxygen probe Temperature probe	Stand-by Flow Dissolved oxygen probe Temperature probe Water meter mA water meter [1]
OUTPUT	1 relay output (Dissolved oxygen) 2 mA output (Dissolved oxygen & Temperature) [1] Alarm output (relay)	2 relay output (Dissolved oxygen) 2 opto coupled output (Dissolved oxygen) 1 relay output for probe cleaning 1 relay output for circulating pump 3 mA output (Dissolved oxygen & Temperature, PID) Alarm output (relay)
ENVIRONMENT TEMPERATURE	-10°C ... 50°C (14°F ... 122°F)	
PROTECTION	IP65 - % working RH: 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 • 12 or 24VDC power supply • ADVANCED USB configuration [2] • ETHERNET configuration [2] • GSM/GPRS configuration [2]	• mA water meter input • 12 or 24VDC power supply • ADVANCED USB configuration [2] • ETHERNET configuration [2] • GSM/GPRS configuration [2] • Modbus 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 EMEC 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 EMEC 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 EMEC 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 EMEC instruments or a PC Web ERMES remote control (PC, smartphone or tablet) Alarm messages via email Alarm messages via SMS
MODBUS	Connection to other devices (PLC) via RS485	PLC plant management	/	PLC connection output for reading and modifying parameters