



# **KD8** SCREEN RECORDER

- Intuitive servicing LCD TFT 5.7" screen, with touch panel.
- Data archiving on CompactFlash card, capacity up to 4 GB.
- IP65 protection grade on the front panel.
- 3 or 6 analog programmable measuring inputs.
- 6 or 12 alarms outputs.
- 4 or 8 digital inputs.
- Visualization of measurements in digital form, analog indicators, diagrams, bargraphs.
- RS-485 and USB serial interfaces.
- MS Windows® CE operating system.
- PC softwares: KD8 SETUP, KD CHECK, KD CONNECT, KD ARCHIVE.
- Programmable events



**C E** • Menu available in various language versions

#### **FEATURES**



#### **INPUTS**



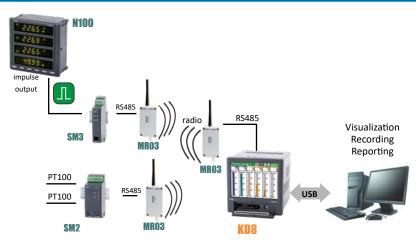
#### **OUTPUTS**



## **GALVANIC ISOLATION**



#### **EXAMPLE OF APPLICATION**

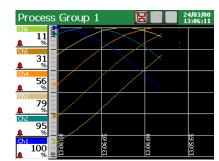


System of measurement, control and recording of temperature and energy with wireless communication.

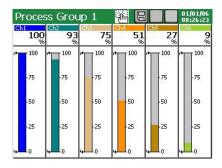
#### **EXAMPLES OF MEASURING DATA PRESENTATION**

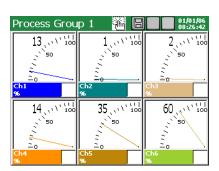
#### Various forms of data display:

- linear diagrams,
- digital indicators,
- analog views,
- bargraphs,
- tables and others. (manual and automatic switching between screens.)











		INPUTS			
Input signal	Measuring ra	Measuring range/ Accuracy class (%)		Minimal subrange/ Accuracy class (%)	
Voltage	0 ±9999 mV	0.15	5 mV	0.25	
Current	0 ±20 mA	0.15	1 mA	0.25	
Thermocouple (TC): J (Fe-CuNi)	-200 1200°C	0.1	100°C	1	
K (NiCr-NiAl)	-200 1370°C		130°C	0.7	
N (NiCrSi-NiSi)	-2001300°C		200°C	0.5	
E (NiCr-CuNi)	-2001000°C		100°C	1	
R (PtRh13-Pt)	0 1760°C	0.2	540°C	0.3	
S (PtRh10-Pt)	01760°C	U.Z	570°C	0.3	
T (Cu-CuNi)	-200 400°C	0.1	110℃	0.9	
B (PtRh30-PtRh6)	400 1820°C	0.2	1000°C	0.2	
L (GOST)	-200 800°C	0.1	90°C	0.2	
K (GOST)	-200 1370°C	0.1	130℃	0.7	
Resistance transmitter (RTD): Pt 100	-200 850°C	0.15		0.25	
Pt 500		0.3		0.5	
Pt 1000		0.3	0.5	0.5	
Ni 100	-60 180°C				
Cu 100	-50 180°C				
GR.21 (GOST'78) (GOST'94)			50°C		
50P (GOST'78) (GOST'94)	-260 1100°C				
100P (GOST'78)					
100P (GOST'94)		0.15		0.25	
50M (GOST'78) (GOST'94)	-200 200°C				
100M (GOST'78) (GOST'94)					
Potentiometric transmitter	50 2000 W		100 W		
Resistance transmitter	0 2000 W		100 W		
Logic input	control signal 0/5 24 V d	.C.	switching frequen	cy up to 50 Hz	

#### SEE ALSO

SOFTWARES ASSISTING THE KD8 RECORDER WORK:

#### **KD ARCHIVE**

Software destined to review
and analyse
archive data
from the
recorder on a PC
computer, stored
in a binary
format with
digital signature.

OUTPUTS		
Output type	Properties	
- electromagnetic relays: ≤ 250 V a.c./1 A or ≤ 30 V d.c./1 A		

DIGITAL INTERFACE		
Interface type	Properties	
RS-485	interface: MODBUS Slave, baud rate 0.3 256 kbit/s, transmission mode: ASCII/ RTU	
USB	device V.1.1, socket USBB-G	

EXTERNAL FEATURES			
Supply voltage	90 <u>230</u> 253 V	input power ≤ 30 VA	
Temperature	operating: 0 <u>23</u> 55°C	storage: -20 60°C	
Humidity	< 70%	condensation inadmissible	

RATED OPERATING CONDITIONS				
Display field LCD 5.7"TFT type		320 x 240 pixels, with touch screen		
Overall dimensions	144 x 144 mm	panel cut-out dimensions: 138+1 x 138+1 mm		
Weight	< 2 kg			
Protection grade	from frontal side: IP65	from terminal side: IP20		

SAFETY AND COMPATIBILITY REQUIREMENTS			
Electromagnetic compatibility	noise emissions	acc. to EN 61000-6-4	
	noise immunity	acc. to EN 61000-6-2	
Isolation between circuits	500 V d.c.		
Isolation between supply and measuring system	2 kV	acc. to EN 61010-1	
Pollution level	2		
Installation category	II		
Maximal operating voltage in relation to earth	for the measuring system, relays and supply: 500 V	acc. to EN 61010-1	
Altitude above sea level	< 2000 m		

#### **KD8 SETUP**

Software destined to configure recorder settings by means of a PC computer.

For more information of our products please visit our website:





### SEE ALSO

SOFTWARES ASSISTING THE KD8 RECORDER WORK:

#### **KD CONNECT**

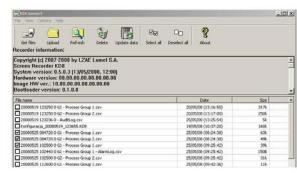
Software
destined for the
communication
between the
recorder and the
PC computer
through the USB
interface in order
to download
archive data and
record/erase on
the CF card.

#### **KD CHECK**

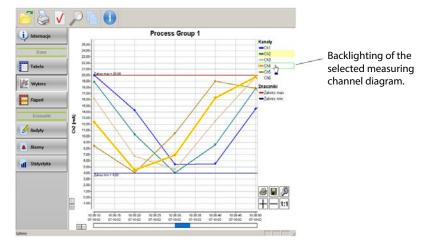
Software destined to verify the digital signature in archive data stored in text format.

For more information of our products please visit our website:

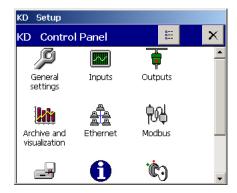




Downloading and erasing of archive data by means of the PC computer - KD CONNECT.



Review of archive data through the PC computer - KD ARCHIVE.



Configuration of the KD8 recorder by means of the PC computer - KD8 SETUP.

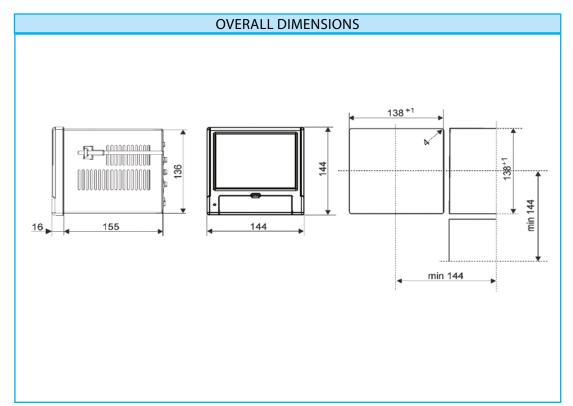


**Checking result:** incorrect file verification

Verification of the digital signature of text data - KD CHECK.

## **KD8** SCREEN RECORDER





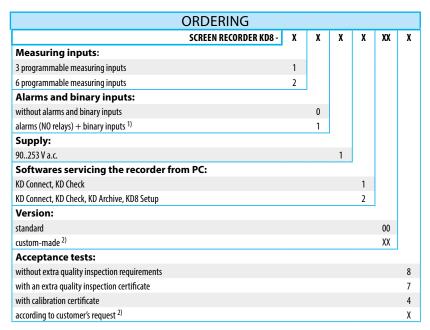
## SEE ALSO

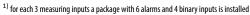


Temperature sensors.



Interface converter PD10.





 $<sup>^{2)}</sup>$  after agreeing with the manufacturer  $\,$ 

#### **Example of order:**

the code **KD8-1-0-1-1-00-0** means:

- KD8 recorder of KD8 type,
  - 1 with 3 programmable measuring inputs,
  - 0 without alarms and binary inputs,
  - 1 supply: 90 .. 253 V a.c.,
  - 1 with KD Connect and KD Check softwares,
- 00 in standard version,
- 0 without extra quality inspection requirements.



KD7 recorder.

For more information of our products please visit our website:





# DITEL MADE BY LUMEL

#### DISEÑOS Y TECNOLOGIA S.A.

Xarol, 6B P.I. Les Guixeres 08915 Badalona - ESPAÑA tel.: +34 933 394 758, fax .:+34 934 903 145 www.ditel.es

made in POLAND by: LUMEL S.A. www.lumel.com.pl 30740031B

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