

# DNL DIGITAL DISPLAY PANEL

## FEATURES:

8  
230 mm

8  
305 mm

MOD  
BUS  
Master

MOD  
BUS  
Slave



- Visualization of turnkey proces values (by RS485 or analog input).
- Data from up to 10 devices are available for i.e. SCADA as registers of DNL Displays.
- Modbus RTU Slave and Modbus RTU Master functionality.
- Analog input 4...20 mA (option).
- Built-in power supplier (15V d.c./50mA) for external transducers.

## INPUTS:

RS  
485

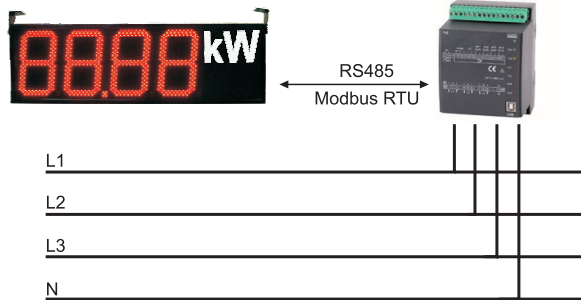
4...20 mA

## OUTPUTS:

RS  
485

15 V d.c.

## EXAMPLE OF APPLICATION



## INPUTS

Input type	Range	Error
RS485 Modbus RTU Master		
current	4...20 mA d.c.	- basic error: 0.1% - additional error from temperature changes: 0.05 %/10 °C

## OUTPUTS

Output type	Properties
supplying output for transducers	15V d.c. / 50mA

## DIGITAL INTERFACE

Interface type	Mode	Baud rate
RS-485 Modbus RTU Slave	8N1, 8N2, 8E1, 8O1	2.4, 4.8, 9.6, 14.4, 19.2, 28.8, 38.4, 57.6, 76.8, 115.2. kbit/s
RS485 Modbus RTU Master	8N1, 8N2, 8E1, 8O1	2.4, 4.8, 9.6, 14.4, 19.2, 28.8, 38.4, 57.6, 76.8, 115.2 kbit/s

## RATED OPERATION CONDITIONS

Supply voltage	100...240 V a.c.	50..60 Hz
Power consumption	< 55 VA	
Temperature	ambient: -10...23...50°C	storage: -25...75°C
Relative humidity	25 .. 95%	inadmissible condensation
Working position	any	
External magnetic field	0...40...400 A/m	

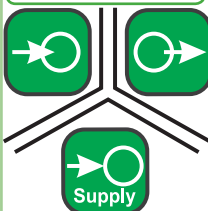
## SAFETY AND COMPATIBILITY REQUIREMENTS

Electromagnetic compatibility	noise immunity	wg PN-EN 61000-6-2
	noise emissions	wg PN-EN 61000-6-4
Isolation between circuits	basic	wg PN-EN 61010-1
Pollution level	2	
Installation category	III	
Maximal phase-to-earth voltage	- for supply and measuring circuits 300V - for other circuits 50 V	
Altitude above sea level	< 2000 m	

## EXTERNAL FEATURES

Readout field	1 row x 4 digits or 2 rows x 4 digits	DNL2 – digit height 230 mm DNL3 – digit height 305 mm
Overall dimensions	acc. to the table 1 and fig. 1	
Weight DNL2	one row : 5,4 kg	two rows: 10,8 kg
Weight DNL3	one row: 7,6 kg	two rows: 15,2 kg
Protection grade	for housing: IP40	for terminals: IP10

## GALVANIC ISOLATION:



Export department:  
Tel: +48 68 45 75 139/  
276 / 305/ 386  
Fax: +48 68 32 54 091  
e-mail: export@lumel.com.pl

LUMEL S.A.  
ul. Słubicka 1  
65-127 Zielona Góra  
POLAND  
[WWW.LUMEL.COM.PL](http://WWW.LUMEL.COM.PL)

**DISPLAY DIMENSIONS**

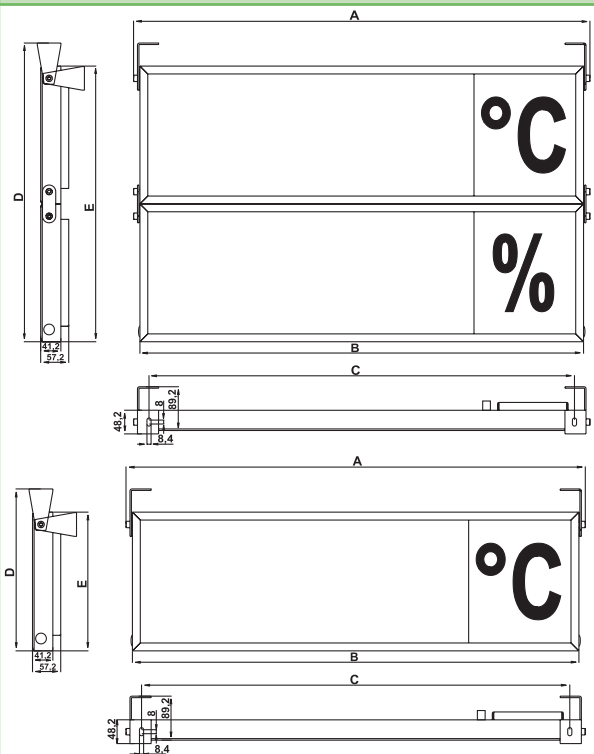


Table 1

	One row version		Two rows version	
	DNL2 [mm]	DNL3 [mm]	DNL2 [mm]	DNL3 [mm]
A	931	1091	931	1091
B	905	1065	905	1065
C	868	1027	868	1027
D	328	414	609	781
E	281	367	562	734

Fig. 1 Dimensions of DNL display with one and two rows.

**SEE ALSO:**



P17

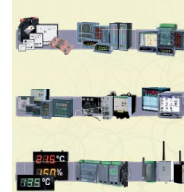


P30U



LUMEL - PROCES Software.

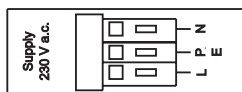
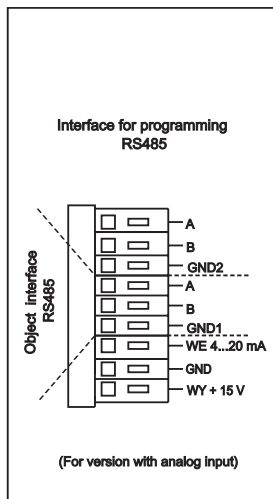
**OUR OFFER**



[www.lumel.com.pl](http://www.lumel.com.pl)

For more information about LUMEL's products please visit our website: [www.lumel.com.pl](http://www.lumel.com.pl)

**CONNECTION DIAGRAM**



**ORDERING**

Digital display panel DNL -	X	X	XX	X	XX	XX	X	X
<b>Digit height:</b>								
230 mm (9")	2							
305 mm (12")	3							
<b>Color of digits in I row:</b>								
red		R						
yellow		Y						
<b>Unit of the I row:</b>								
lack			00					
acc. to the table 2			XX					
<b>Color of digits in II row:</b>								
lack of row			0					
red		R						
yellow		Y						
<b>Unit of the II row:</b>								
lack			00					
acc. to the table 2			XX					
<b>Version:</b>								
standard			00					
1 row with input 4...20 mA and output +15 V			01					
custom-made*			XX					
<b>Language:</b>								
Polish					P			
English					E			
other*					X			
<b>Acceptance tests:</b>								
without extra quality requirements							0	
with an extra quality inspection certificate							1	
acc. to customer's requirements*							X	

\* after agreeing with the manufacturer

Table 2

Code	Unit
00	lack
01	%
02	°C
03	szt.
04	imp.
05	kg
06	m/s
07	szt./h
08	m <sup>3</sup>
09	obr
XX	on order

**ORDER EXAMPLE:**

The code: **DNL-2-Y-01-0-00-00-E-1** means: display panel with one row with yellow digits, with unit %, standard version, English language, with an extra quality inspection certificate.

**Export department:**  
Tel: +48 68 45 75 139/  
276/ 305/ 386  
Fax: +48 68 32 54 091  
e-mail: [export@lumel.com.pl](mailto:export@lumel.com.pl)

LUMEL S.A.  
ul. Słubicka 1  
65-127 Zielona Góra  
POLAND  
[WWW.LUMEL.COM.PL](http://WWW.LUMEL.COM.PL)