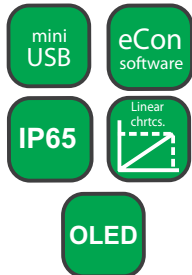
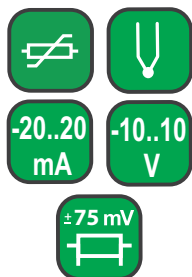


# N21 DIGITAL PANEL METER

## FEATURES:



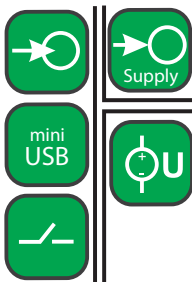
## INPUTS:



## OUTPUTS:



## GALVANIC ISOLATION:



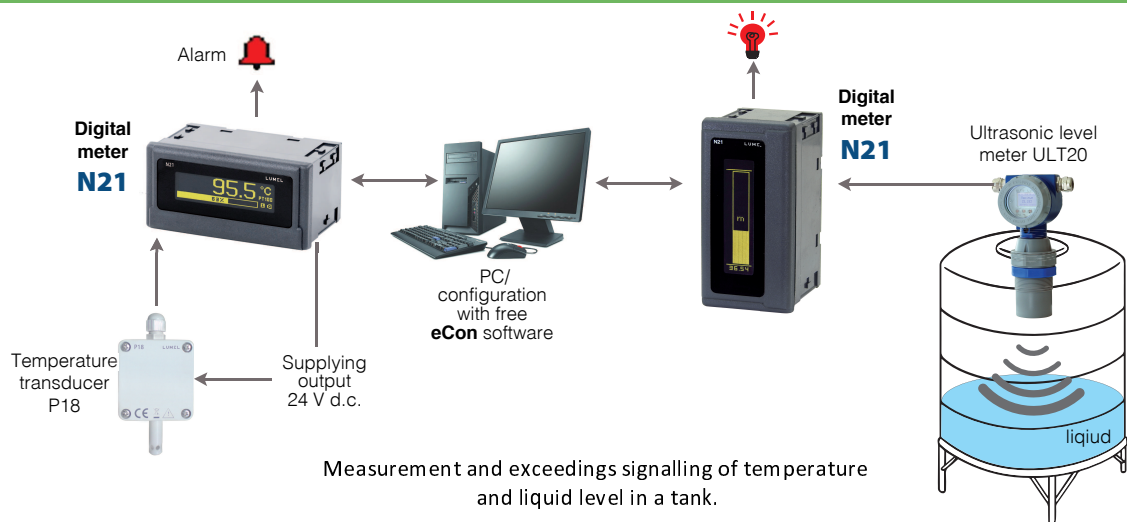
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- Universal measuring input (for standard signals and cooperation with temperature sensors).
- **New range in DC voltage measurement: +/- 75mV.**
- Relay alarm output.
- **Visualization of the measurement as a horizontal or vertical bar graph - NEW!**
- Universal supply voltage from 24 V up to 230 V a.c./d.c.
- Supply of object transducers 24 V d.c.
- OLED display.
- Meter configuration through miniUSB connector with free eCon software.
- Programmable parameters in eCon software:
  - selection of measured value,
  - rescaling of indications (individual characteristic),
  - accuracy of measured value (decimal point),
  - alarm output mode,
  - measurement averaging time,
  - defining your own unit,
  - language selection.

## EXAMPLE OF APPLICATION



## INPUTS

Input type	Measuring range	Parameters	Basic error
Voltage input	-90 mV...-75 mV...75 mV...90 mV -12 V...-10 V...10 V...12 V	Input resistance: >200 kΩ Input resistance: >1 MΩ	± (0.1% of range+ 1 digit)
Current input	-24 mA...-20 mA...20 mA...24 mA	Input resistance: <10 Ω ± 1%	
Temperature measurement Pt100	- 200...850°C	current flowing through the sensor < 300 μA	
Temperature measurement through J thermocouple	- 50...1200°C		
Temperature measurement through K thermocouple	- 50...1370°C		

## OUTPUTS

Output type	Properties
Alarm output	alarm relay output NO, load capacity 250 V~/0.5 A~ number of switches 1x10 <sup>5</sup>
Supply for external transducers	24 V d.c. ± 5%, 30 mA

## EXTERNAL FEATURES

Readout field	OLED display 128 x 32 pixels in amber color	
Weight	< 0.25 kg	
Overall dimensions	96 × 48 × 64 mm	panel cut-out: 92 <sup>+0.6</sup> × 45 <sup>+0.6</sup> mm
Protection grade (acc. to EN 60529)	from frontal side: IP65	from terminal side: IP20

## RATED OPERATING CONDITIONS

Supply voltage	22..60 V a.c. 50..400 Hz / 20..60 V d.c. (terminals 12-13) 60..253 V a.c. 40..400 Hz / 60..300 V d.c. (terminals 13-14)	power consumption < 3 VA
Operating temperature	ambient: -10...23...55°C	storage: -25...85°C
Relative humidity	< 95%	condensation inadmissible
Operating position	any	

## SAFETY AND COMPATIBILITY REQUIREMENTS

Electromagnetic compatibility	noise immunity	acc. to EN 61000-6-2
	noise emissions	acc. to EN 61000-6-4
Safety requirements		acc. to EN 61010-1
Galvanic isolation	3.2 kV d.c.	

## CONNECTION DIAGRAMS

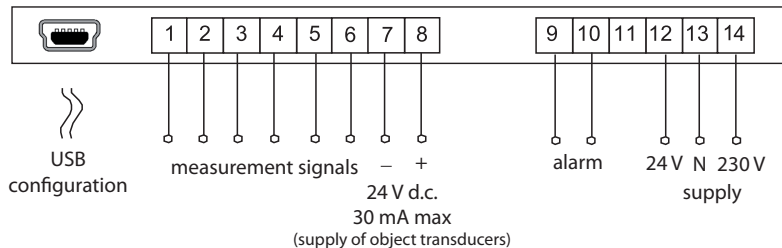


Fig. 1 Electrical connections of N21 meter.

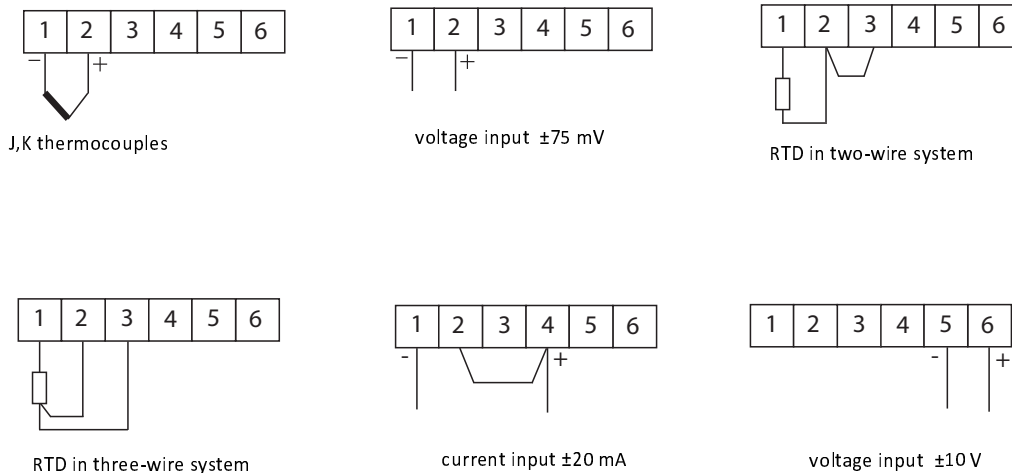


Fig. 2. Connection to measuring inputs.

## ORDERING

ORDERING CODE			
N21 -	X	X	X
<b>Version (display):</b>			
horizontal	0		
vertical	V		
<b>Version:</b>			
standard	0		
<b>Language:</b>			
Polish		P	
English		E	
<b>Acceptance tests:</b>			
without extra requirements			0
with an extra quality inspection certificate			1
with test certificate			2

### N21 meter has in standard:

- programmable input,
- relay output,
- supplying output 24 V d.c.,
- supply voltage: 22..60 V a.c. 50..400 Hz / 20..60 V d.c. (terminals 12-13), 60..253 V a.c. 40..400 Hz / 60..300 V d.c. (terminals 13-14),
- miniUSB socket for meter programming.

### ORDER EXMAPLE:

The code **N21-00E0** means:

- N21** – meter N21,
- 0** - horizontal version (display),
- 0** - standard version,
- E** - english version,
- 0** - without extra requirements.

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

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