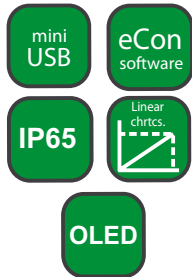
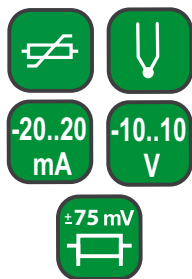


# N21 DIGITAL PANEL METER

## FEATURES:



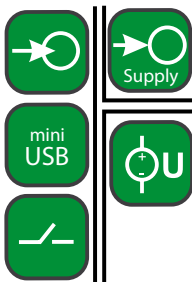
## INPUTS:



## OUTPUTS:



## GALVANIC ISOLATION:



Export department:  
Tel.: +48 68 45 75 130

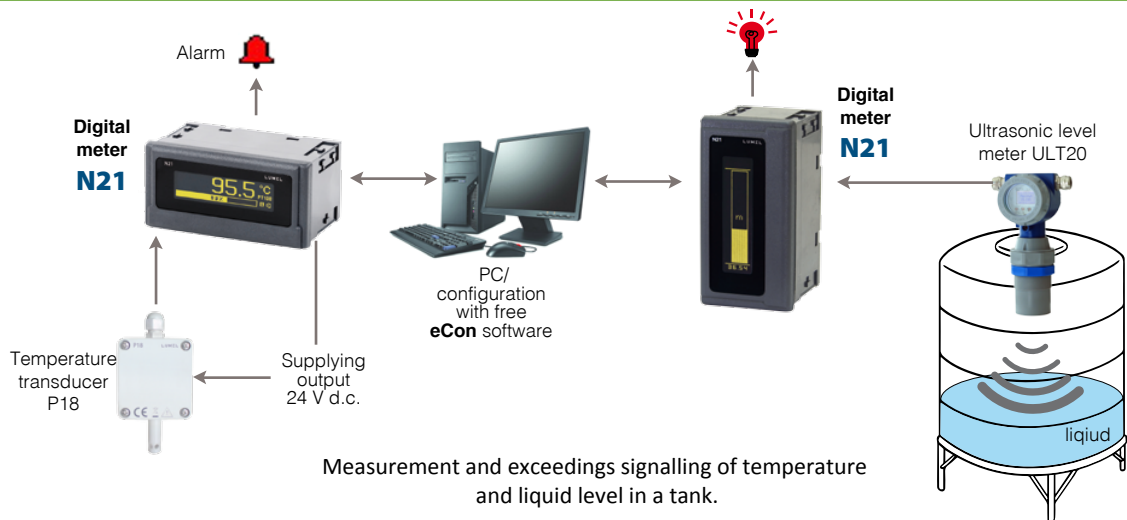
e-mail: [export@lumel.com.pl](mailto:export@lumel.com.pl)

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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

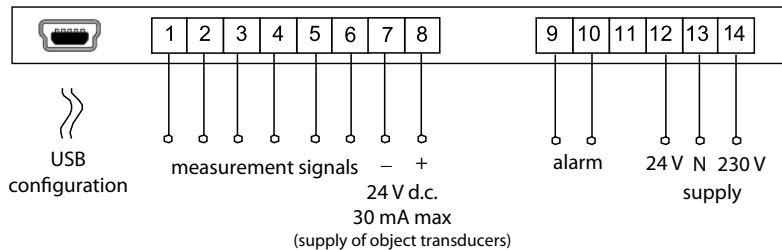


Fig. 1 Electrical connections of N21 meter.

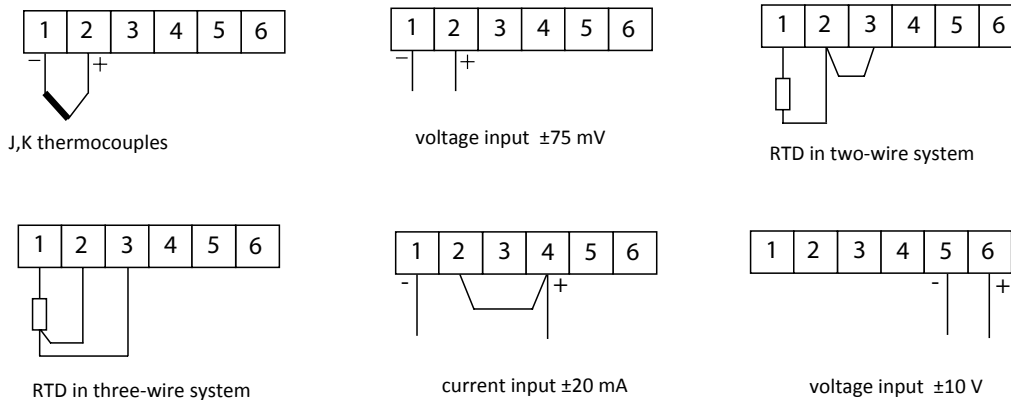


Fig. 2. Connection to measuring inputs.

## ORDERING

Code	Description
<b>N21 00M0</b>	horizontal version; standard version: – universal input – relay output – power output 24 V d.c. – supply voltage 24 V a.c./d.c., 230 V a.c./d.c. – miniUSB port for programming documentation in Polish and English, test certificate
<b>N21 V0M0</b>	vertical version; standard version: – universal input – relay output – power output 24 V d.c. – supply voltage 24 V a.c./d.c., 230 V a.c./d.c. – miniUSB port for programming documentation in Polish and English, test certificate

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