

N21 DIGITAL PANEL METER

FEATURES:

mini
USB

eCon
software

IP65

Linear
chrtcs.

OLED

INPUTS:



-20...20
mA

-10...10
V

± 60 mV



OUTPUTS:



GALVANIC ISOLATION!



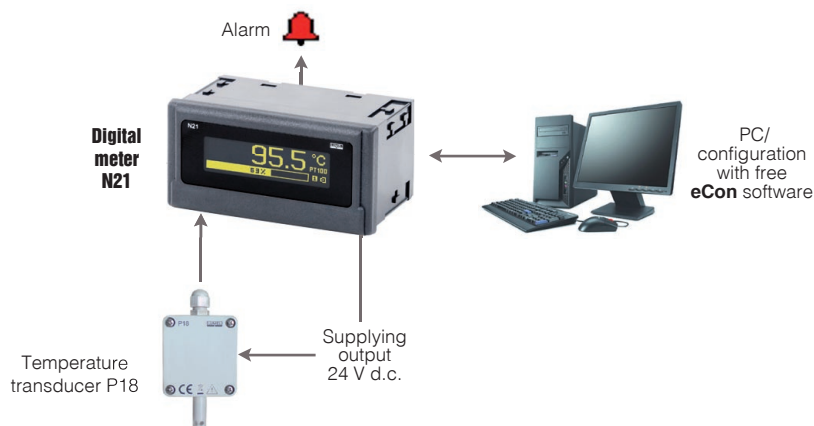
Supply

mini
USB



- Universal measuring input (for standard signals and cooperation with temperature sensors).
- Relay alarm output.
- 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



Measurement and signalling of temperature exceedings.

INPUTS

Input type	Measuring range	Parameters	Basic error
Voltage input	-72 mV...-60 mV...60 mV...72 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 ⁵
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 ^{+0.6} × 45 ^{+0.6} 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

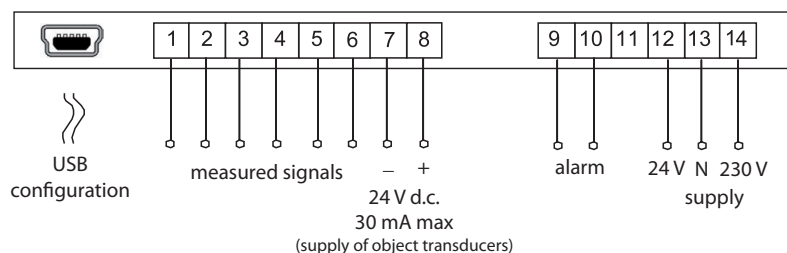
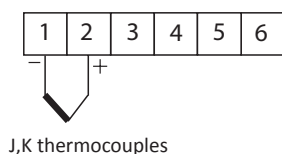
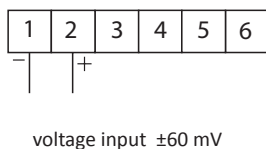


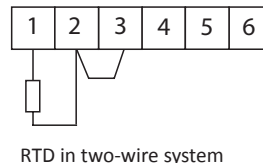
Fig. 1 Electrical connections of N21 meter.



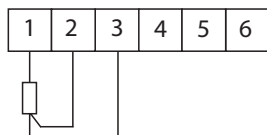
J,K thermocouples



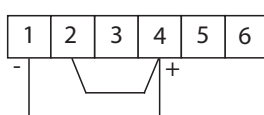
voltage input ± 60 mV



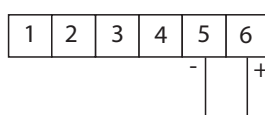
RTD in two-wire system



RTD in three-wire system



current input ± 20 mA



voltage input ± 10 V

Fig. 2. Connection to measuring inputs.

ORDERING

ORDERING CODE

	N21 -	XX	X	X
Versoin:				
standard		00		
custom-made*		XX		
Language:				
Polish			P	
English			E	
other*			X	
Acceptance tests:				
without extra requirements				0
with an extra quality inspection certificate				1
acc. to customer's request*				X

* - only after agreeing with the manufacturer

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,
- 00** - standard version,
- E** - english version,
- 0** - without extra requirements.

SEE ALSO:



Free eCon software for programming LUMEL products. Available on our website.

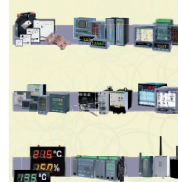


Current transformers from 5 A up to 6 kA.



3-phase power network meter ND20.

OUR OFFER



www.lumel.com.pl