

FEATURES:

PD14
compatible

LPConfig
compatible

$Y=a \cdot x+b$
Individual
characteristic

INPUTS:

DC

-20..20
mA

-10..10
V

OUTPUTS:

-20..20
mA

-10..10
V

GALVANIC ISOLATION:



Export department:
English: +48 68 32 95
302 / 321 / 276 / 386 / 233
German: +48 68 32 95 305
French: +48 68 32 95 304
Russian: +48 68 32 95 321
Fax: +48 68 32 54 091
e-mail: export@lumel.com.pl

LUMEL S.A.
ul. Sulechowska 1
65-022 Zielona Góra
POLAND

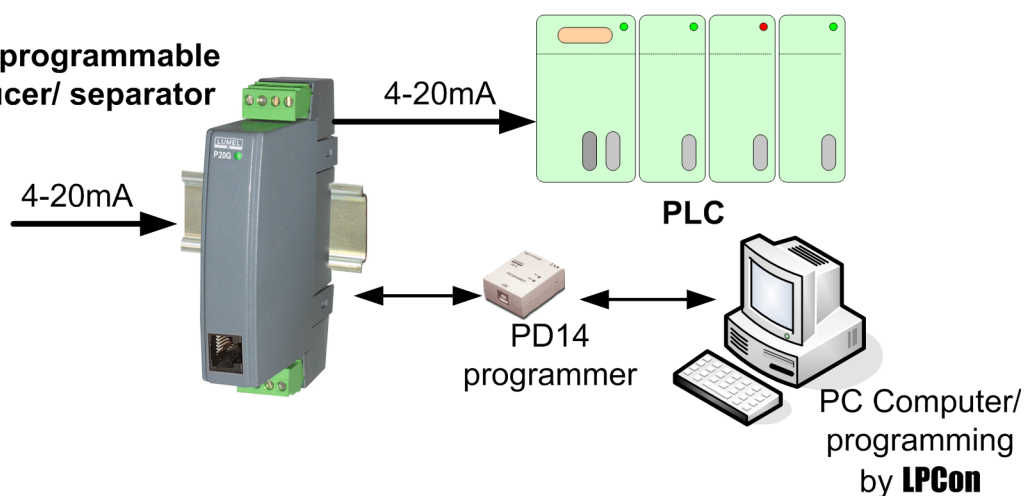
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- ✓ Realization of the galvanic isolation of current and voltage analog signals.
- ✓ Output signal is galvanically isolated from the input signal and the supply.
- ✓ Linear conversion of one kind of signal led to its input into a standard output signal of another kind.
- ✓ Fully configurable through the PD14 programmer. By means of the programmer, one can change the input type, output type, measurement averaging time and recalibrate the analog according to the output individual characteristic, and also read out the measured value
- ✓ Small dimensions
- ✓ 0,2 accuracy class

EXAMPLE OF APPLICATION

P20G – programmable transducer/ separator



Separation between PLC analogue inputs.

INPUTS

Input:	Measuring range:	Parameters	Overloads	Error
Current: -20..20mA	-20..20 mA; -5..5 mA; 0..20 mA 0..5 mA 4..20 mA	Resistance: >1M Ω	Short duratin over- load: 5 In Sustained overload 1.1 In	Conversion class: 0.2
Voltage: -10..10 V	-10..10 V; -5..5 V -1..1 V 0..10 V 0..5 V 0..1V	Resistance: 12 Ω ± 1%	Short duratin over- load: 5 Un Sustained overload 1.2 Un	Additional error: change of the ambient temperature 25% of the class/10K

OUTPUTS

Output kind	Properties	Remarks
-20..20 mA	$R_{load} \leq 500 \Omega$	Conversion class: 0.2;
-10..10 V	$R_{load} \geq 500 \Omega$	

EXTERNAL FEATURES

Weight	<0,125 kg	
Dimensions	22,5 x 120 x 100 mm	
Protection level(acc. to EN 60529)	ensured by the housing: IP40	from the terminal side: IP20
Fitting	on a 35 mm rail	acc. to EN 60715

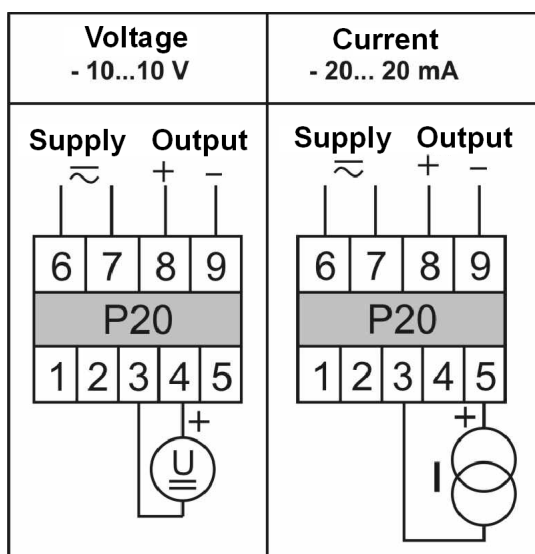
RATED OPERATING CONDITIONS

Supply voltage	85..253 V a.c./d.c. (45..65Hz) or 20..40 V a.c./d.c. (45..65 Hz)	power consumption: <4 VA
Temperature	ambient: -20..23..55 °C	storage: -25..85 °C
Relative humidity	≤ 95%	water condensation inadmissible
Working position	any	
Transducer preheating time	10 min	
Averaging time of the measurement	≥ 0,1 s	
Response time of the separator	≥ 0,1 s	

SAFETY AND COMPATIBILITY REQUIREMENTS

Electromagnetic compatibility	Noise immunity	acc. to EN 61000-6-2
	Noise emission	acc. to EN 61000-6-4
Insulation between circuits	basic	acc. to EN 61010-1
Pollution degree	2	
Installation category	III	
Maximal phase-to-earth working voltage	for the supply circuit: 300V (execution for supply: 230V)	
	for the measuring input: 50V for the output: 50V	
Altitude above sea level	<2000 m	

CONNECTION DIAGRAMS



Electrical connection diagram of the P20G separator

ORDERING

TABLE 1. ORDERING CODES:

	P20G - XX XX X XX X
Input:	
kind of programmed input: see table 2	XX
Output:	
kind of programmed output: see table 2	XX
Supply voltage	
85..253 V a.c./d.c.	1
20..40 V a.c./d.c.	2
Execution	
Standard	00
custom-made*	XX
Acceptance tests:	
without extra quality inspection requirements	8
with an extra quality inspection certificate	7
acc. to customer's agreements	X

TABLE 2. CODING OF THE P20G SEPARATOR
KIND OF INPUT AND OUTPUT

Range	Input code	Output code
0..1 V	01	01**
0..5 V	02	02
0..10 V	03	03
±1 V	04	04**
±5 V	05	05
±10 V	06	06
0..5 mA	07	07**
0..20 mA	08	08
±5 mA	09	09**
±20 mA	10	10
4..20 mA	11	11
Custom-made execution*	XX	XX

* - the code will be established by the manufacturer
** - conversion class > 0,2

Order example:

The code **P20G - 08 06 1 00 7** means
P20G - Separator of analog signals (U DC and I DC)
08 - Kind of programmed input: 0..20mA
06 - Kind of programmed output; ±10V
1 - supply voltage: 85..253 V a.c./d.c.
00 - standard execution
7 - with an extra quality inspection requirements

SEE ALSO:



Free LPConfig software for easy programming of LUMEL's products. Available on our website



PD14 programmer - unit for programming LUMEL's products, with USB connection, LPCon compatible. For more details check DIGITAL METERS catalogue or our website.



Check our offer of different transducers in MEASURIN TRANSUCERS catalogue or on our website.



For more information about products check Product Guide 2009 catalogue or visit our website.

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 French: +48 68 32 95 304
 Russian: +48 68 32 95 321
 Fax: +48 68 32 54 091
 e-mail: export@lumel.com.pl

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 POLAND
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