

# SM4 MODULE OF LOGIC OUTPUTS

## FEATURES:



- Remote control of actuators from monitoring systems or PLC
- 4 relay outputs or 8 OC outputs steered through RS-485/Modbus
- Fixing on a TS35 rail
- Full galvanic separation between outputs (for relay outputs)
- Configuration through the free LPConfig software.

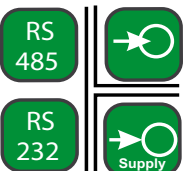
## INPUTS:

RS 485

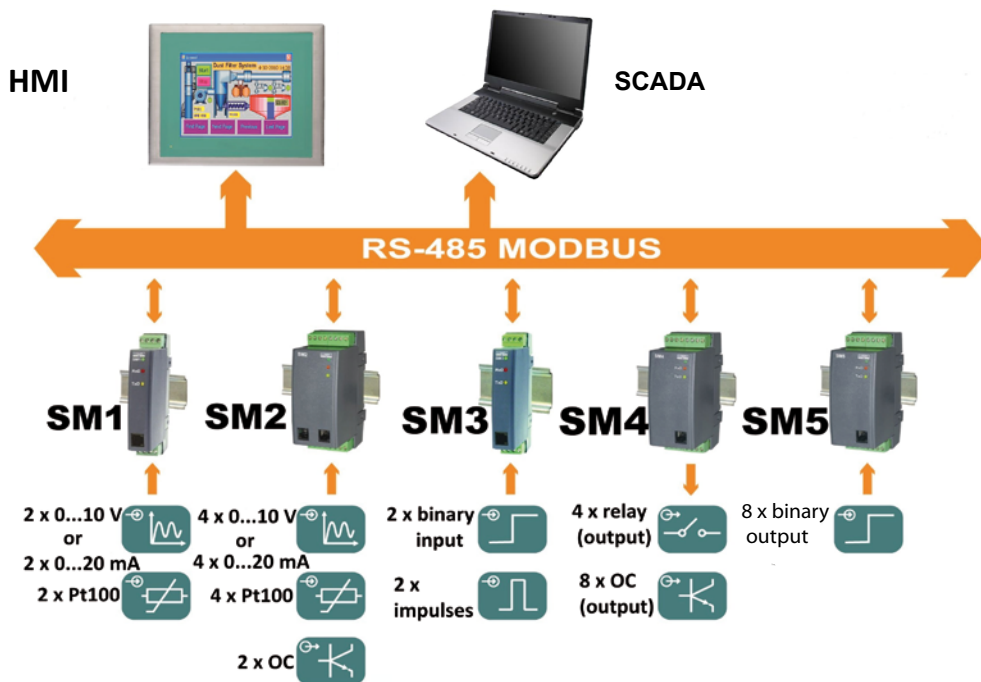
## OUTPUTS:



## GALVANIC ISOLATION:



## EXAMPLE OF APPLICATION



## EXTERNAL FEATURES

Overall dimensions	45 x 120 x 100 mm	
Weight	< 0.25 kg	
Protection grade	IP40	from terminal side: IP20

## DIGITAL INTERFACE

Interface type	Transmission protocol	Modes	Baud rate
RS-485	Modbus RTU	8N2,8E1,8O1,8N1	2400; 4800; 9600; 19.2 k;
	Modbus ASCII	8N1, 7E1, 7O1	38.4 k, 57.6 k, 115 k bit/s

## INPUTS

Input type	Range	Remarks
Digital interface	RS-485	Modbus ASCII/RTU

## OUTPUTS

Output type	Properties
Relay	5 A, 250 V a.c. 150 V d.c., 1250 VA for a.c., 150 W for d.c.
OC	0.1 A for max. 2 active simultaneously 0.05 A for all active simultaneously

## RATED OPERATING CONDITIONS

Supply voltage	Temperature	Input power: ≤ 4 VA
85...253 V a.c./d.c. (40...400 Hz) or d.c. 20...50 V a.c./d.c. (40...400 Hz) or d.c.	ambient: -10...23...55°C	
Temperature	ambient: -10...23...55°C	
Relative humidity	< 95%	
Operating position	on a TS35 rail	
External magnetic field	< 400 A/m	

Export department:  
+48 68 45 75 130  
e-mail: export@lumel.com.pl

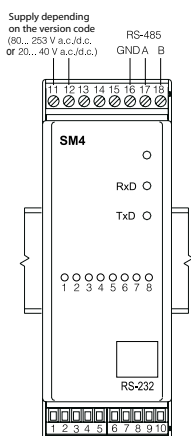
LUMEL S.A.  
ul. Słubicka 4  
65-127 Zielona Góra  
POLAND  
WWW.LUMEL.COM.PL

## SAFETY AND COMPABILITY REQUIREMENTS

Electromagnetic compatibility	Noise immunity	acc. to EN 61000-6-2
	Noise emissions	acc. to EN 61000-6-4
Isolation between circuits		acc. to EN 61010-1
Pollution level	2	
Installation category	III	
Maximum phase-to-earth operating voltage	Supply: 300 V, input 50 V, Output: 50 V	
Altitude a.s.l.	2000 m	

## CONNECTION DIAGRAMS

### Electrical connection of the logic output module



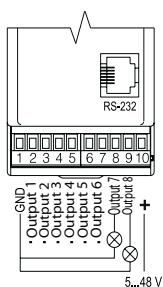
### Description of logic output module leads. Version with 4 relay outputs

Terminal No	Terminal description
1	GND line
2,3	Relay output no 1
4,5	Relay output no 2
6,7	Relay output no 3
8,9	Relay output no 4
10	5 V d.c. line
11,12	Module supply lines
13...15	No used
16	GND line of RS-485 interface with optoisolation
17	Line A of RS-485 interface with optoisolation
18	Line B of RS-485 interface with optoisolation

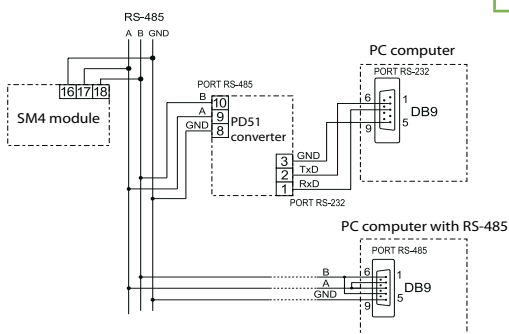
### Description of logic output module leads. Version with 8 OC output types

Terminal No	Terminal description
1	GND line of logic outputs
2	Output 1 line - output no 1
3	Output 2 line - output no 2
4	Output 3 line - output no 3
5	Output 4 line - output no 4
6	Output 5 line - output no 5
7	Output 6 line - output no 6
8	Output 7 line - output no 7
9	Output 8 line - output no 8
10	+ line - supply voltage of outputs
11,12	Lines of module supply
13...15	Not used
16	Mass of RS-485 interface with optoisolation
17	Line A of RS-485 interface with optoisolation
18	Line B of RS-485 interface with optoisolation

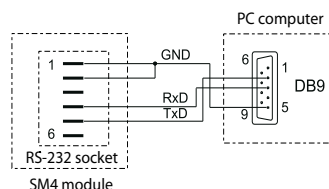
### Exemplary connection of the logic outputs



### Connection of RS-485 and RS-232 interfaces



### Connection of RS-232 interface



## ORDERING

Module of logic outputs - SM4	X	X	XX	X
<b>Supply:</b>				
85...253 V a.c./d.c.	1			
20...50 V a.c./d.c.	2			
<b>Kind of outputs:</b>				
8 outputs of OC type		1		
4 relay outputs			2	
<b>Version:</b>				
standard			00	
custom-made*			XX	
<b>Acceptance tests:</b>				
without additional quality inspection requirements				8
with an extra quality inspection certificate				7
acc.to customers request *				X

\* after agreeing with the manufacturer

### Ordering example:

The code **SM4 - 1 2 00 7** means:

**SM4** - module of SM4 type

**1** - supply voltage: 85...253 V a.c./d.c.

**2** - 4 output relays

**00** - standard version

**7** - with an extra quality inspection certificate

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**Export department:**  
+48 68 45 75 130  
e-mail: [export@lumel.com.pl](mailto:export@lumel.com.pl)

**LUMEL S.A.**  
ul. Słubicka 4  
65-127 Zielona Góra  
POLAND  
[WWW.LUMEL.COM.PL](http://WWW.LUMEL.COM.PL)