P30O TRANSDUCER OF PULSES, FREQUENCY, TURNS, OPERATION TIME



NEW

CE

- 2 universal pulse inputs.
- Version: standard, with SD card, with Ethernet and internal memory.
- Mathematical functions for each input.
- Individual characteristic (up to 21 points) for each input.
- 1 or 2 (option) alarm output.
- Power supply of object transducers 24V d.c. (option).
- RS485 interface Modbus RTU Slave, Modbus TCP Slave (option).
- Data recording in internal memory up to 4MB, in external SD/SDHC card (option) or internal file system memory (8GB) (option).
- Transducer configuration using buttons, RS485 interface and eCon software, WWW server.
- Firmware upgradeable by the user.

Features

MOD BUS Slave | MOD BUS TCP | HTTP | FTP | SD/ SDHC | eCon Program | 21 points charact. | RTC | Firmware upgrade | Password protection

2 x Universal Input

Hz | Value setting

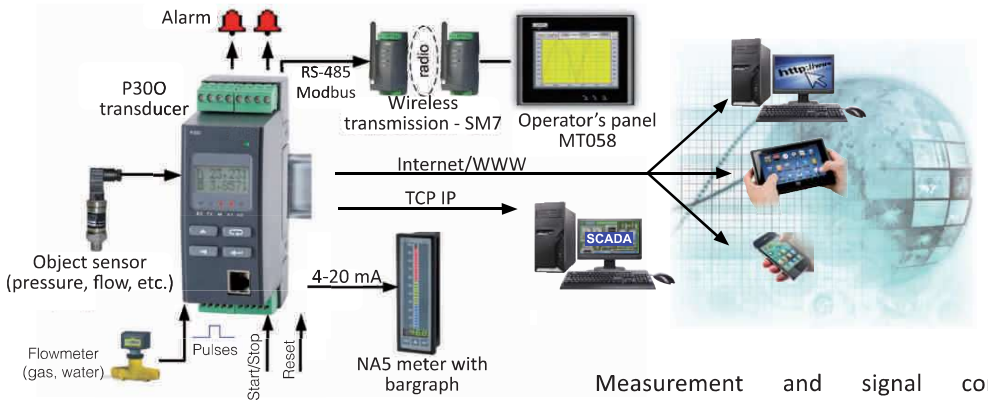
Output

U | RS 485

Galvanic Isolation

Supply | RS 485

EXAMPLE OF APPLICATION:



Measurement and signal conversion with its visualization and retransmission.

MAIN INPUT

Input type No. 1	Nominal range	Maximal range	Class
Number of pulses[1]	-99999...99999	-99999...99999	±1 pulse
Frequency f < 10 kHz[1]	0.05...10000 Hz	0.05...12000 Hz	0.01
Rational speed [1]	0....60000 [Rot/min]	0....72000 [Rot/min]	0.01
Period t < 20s [1]	0.0001...20 [s]	0.0001...21 [s]	0.01
Period t < 1.5 h	0.001...5400 [s]	0.0001...5600 [s]	0.01
Frequency f < 1 MHz	0.1...1000 kHz	0.1...3000 kHz	0.01
Operating time	0...99999 [h]	0...99999 [h]	0.5 sec/ 24h
Current time	00.00 ... 23.59	00.00 ... 23.59	0.5 sec/ 24h
Counter INPUT1 - INPUT2[1]	-99999...99999	-99999...99999	±1 pulse
Encoder	-99999...99999	-99999...99999	±1 pulse

AUXILIARY INPUT

Input type No. 2	Nominal range	Maximal range	Class
Number of pulses[1]	-99999...99999	-99999...99999	±1 pulse
Frequency f < 10 kHz[1]	0.05...10000 Hz	0.05...12000 Hz	0.01
Rational speed[1]	0....60000 [Rot/min]	0.3....72000 [Rot/min]	0.01
Period t < 20s[1]	0.0001...20 [s]	0.0001...21 [s]	0.05
Period t < 1.5 h	0.001...5400 [s]	0.0001...5600 [s]	0.01
Frequency f < 1 MHz	0.1...1000 kHz	0.1...3000 kHz	0.01
Operating time	0...99999 [h]	0...99999 [h]	0.5 sec/ 24h
Current time	00.00 ... 23.59	00.00 ... 23.59	0.5 sec/ 24h
Setting value	-99999...99999	-99999...99999	-

duration time of control pulse (START/STOP, RESET functions) >10 ms, input and control signals 5...24 V d.c.

[1] Minimal duration time of high or low level signal is 40µs - measured value can be incorrect, if for boundary frequency 10 kHz the pulse duty cycle will be < 30% or or greater than 70%

OUTPUTS

Output type	Properties	Remarks
Analog	Current: 0/4...20 mA, load resistance ≤ 500 Ω; Voltage: 0...10 V, load resistance ≥ 500 Ω	accuracy class: 0,1
Relay	1 or 2 relays; voltageless contacts – NO – maximum load 5A 30V d.c., 250V a.c.	
Supplying output	24 V d.c. / 30 mA (option)	

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DIGITAL INTERFACE

Interface type	Protocol	Remarks
RS-485	Modbus RTU: 8N2, 8E1, 8O1, 8N1; Address 1...247	Baud rate: 4.8, 9.6, 19.2, 38.4, 57.6, 115.2, 230.4, 256 kbit/s
Ethernet 10/100 Base-T	Modbus TCP, HTTP, FTP	WWW server, FTP server, DHCP client

EXTERNAL FEATURES

Overall dimensions	45 x 120 x 100 mm	
Weight	< 0.25 kg	
Protection grade	for housing: IP40	for terminals: IP10
Readout field	LCD 2 x 8	

RATED OPERATION CONDITIONS

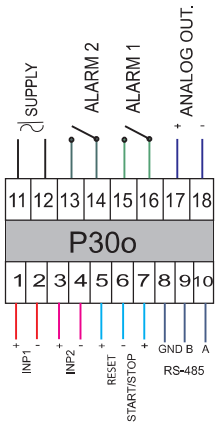
Supply voltage	• 85..253 V d.c. / a.c. (40..400 Hz) • 20..40 V a.c. (40..400 Hz) or 20...60 V d.c.	Power consumption < 5 VA
Temperature	ambient: -25...23...+55°C	storage: -30...+70°C
Relative humidity	25...95 %	inadmissible condensation
Working position	any	

SAFETY AND COMPATIBILITY REQUIREMENTS

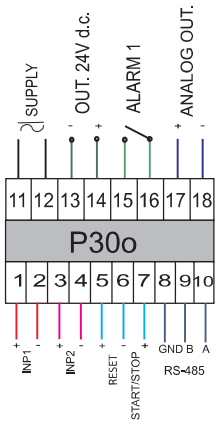
Electromagnetic compatibility	noise immunity	acc. EN 61000-6-2
	noise emissions	acc. EN 61000-6-4
Isolation between circuits	basic	acc. EN 61010-1
Pollution level	2	acc. EN 61010-1
Installation category	III	
Maximal phase-to-earth voltage	• for supply circuits 300 V • for other circuits 50 V	
Altitude above see level	< 2000 m	

CONNECTION DIAGRAM

P30o-XX1XXXXX



P30o-XX2XXXXX



ORDERING

P30o -	X	XX	X	X	XX	X	X
Analog output:							
current (range 0/4...20 mA)	1						
voltage (0...10 V)	2						
Additional equipment:							
without		0					
with external SD/SDHC slot		1					
with Ethernet interface and internal file system memory		2					
Additional output:							
relay (NO), 5 A 30 V d.c., 250 V a.c.			1				
supply 24 V d.c. / 30 mA			2				
Supply:							
85...253 V a.c./d.c.				1			
20...40 V a.c., 20...60 d.c.				2			
Version:							
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

* after agreeing with the manufacturer.

Order example:

Code P30o-112100E1 means transducer execution with current output, SD slot for SD card, with additional output 24 V d.c./ 30 mA, power supply 85...253 V a.c./d.c., standard version, English language, without extra requirements.

ACCESORIES:

SD CARD	
Capacity	Ordering code
1 GB	0923-611-193
2 GB	0923-611-194

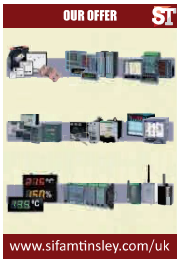
See Also



KD7 recorder with MODBUS master protocol for recording data measured by P30O transducer.



SM3 binary inputs module. For readout of binary states and pulses through RS-485 protocol.



For more information about SIFAM's products please visit our website www.sifamtinsley.com/uk

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