

DIGITAL PROCESS MONITOR DMP 01

for current and voltage signals

INPUT SIGNALS	
Preset	
CURRENT	0 – 20 mA DC
	4 – 20 mA DC
VOLTAGE	0 – 10 V DC
Adjustable by user	
CURRENT	+/- 0 – 21 mA DC
VOLTAGE	+/- 0 – 10,5 V DC

OPTIONAL ACCESSORIES	
2 or 4 relays outputs	
relay output L1, L2, L3 a L4	230 VAC @ 5A Independent. set
Isolated analogue output	
CURRENT	0 – 20 mA DC 4 – 20 mA DC
due wirrings	active / passive
VOLTAGE	0 – 10 V DC
Excitation power supply	
24 VDC +/- 10% 30mA nebo 130mA	

TECHNICAL DATA	
DISPLAY	+/- 29 999 – red LED 14,2 mm
POWER SUPPLY	24 VAC or 24 VDC toleration: -15% / +20%
POWER CONSUMPTION	2,5 W – monitor without accessories
	+ 0,7 W – 2 relays output
	+ 1,4 W – 4 relays output
	+ 0,7 W – isolated analogue output
<i>Device has a fuse T500mA</i>	
	+ 1,0 W (3,0W) – excitation power supply
INPUT RESISTANCE	current input – 50Ω + 13 Ω PTC
	voltage input – 270kΩ
CONVERSION	linear
SAMPLES	16,7 meas./sec – internal measure
	4 samp./sec – for display
DIGITAL RESOLUTION	analogue input 20 bits / analogue output 14 bits
	analogue output – 14 bits
ACCURACY	+/- 0,05 % from full range , +/- 2digits
TEMP. COEFFIC.	0,005 % from full range / °C @ T _{ref} = 23°C
ISOLATION STRENGTH	510 V eff / 1 min <i>input X output ; power supply X input, output</i>
OUTPUT IMPEDANCE	0 – 10 V DC : more than 5 kΩ
	0/4 – 20 mA : less than 600 Ω
RELAYS OUPUT	2 or 4 switching contacts 230 VAC @ 5A
LIMITS L1 – L4	adjustable in full range of scale (+/- 29 999)
LIMITS L1 – L4 HYSTERESIS	value –adjustable in range 0 to 29 999
	timing – adjustable in range 0,0 to 299,9 sec
LIMITS L1 – L4 LOG. FUNCTION	direct
	indirect
PANEL CUTOUT	91 x 44 mm (w x h)
DIMENSIONS	96 x 48 x 85 mm (w x h x d)
ENCLOSURE	IP40
WIRING CONNECTION	terminal strip <i>max. conductor cross-section is 2,5mm</i>
WEIGHT	270 g – with all optionals (2limits,Exc.supply,AO)
STABILISATION	5 minutes
OPERATING TEMPERATURE	0 °C to +50 °C
OPERATION	continuos
SITE ALTITUDE	max. 2000 metres above the sea level
EMC resistivity due standarts	ČSN EN 61000-4-2,3,4,5,6,8
	ČSN EN 55081-1
EMC immunity influence	max. +/- 0,1% from full signal with unshielded wires

INTRODUCTION	
<p>Digital process monitor DMP 01 provides displaying measured value on user set scale. To control technological processes, process monitor could be equipped with optional relays output. By adding optional isolated analogue output measured signal could be pass on into e.g. control system, analogue card, etc... Excitation power supply is available in two verisons 30 mA and 130 mA.</p>	
<h3>FUNCTIONS</h3> <ul style="list-style-type: none"> <input type="checkbox"/> DISPLAYING measured physical value <input type="checkbox"/> INPUT SIGNAL SELECTION by user <input type="checkbox"/> SCALE SETUP in full range by user <input type="checkbox"/> RELAYS FUNCTIONS selectable by user <ul style="list-style-type: none"> ▪ limit value – for each relay adjustable independently by user ▪ limit value hysteresis – for each relay adjustable independently by user ▪ limit time hysteresis – for each relay adjustable independently by user ▪ direct / indirect function – relays closes / opens when value reach limit <input type="checkbox"/> OUTPUT SIGNAL SELECTION by user <input type="checkbox"/> DISPLAY BRIGHTNESS selection in two levels <input type="checkbox"/> DIGITAL FILTERS for measured signal <ul style="list-style-type: none"> ▪ without filter (standart 50Hz filtration) ▪ trend filter ▪ moving average <input type="checkbox"/> GALVANICAL ISOLATION <ul style="list-style-type: none"> ▪ power supply from: input and output signal ▪ input signal is galvanically isolated from output signal ▪ relays outputs are galvanically isolated 	
<h3>DESCRIPTION</h3> <p>Device is controlled by four buttons located on front panel . All settings are stored in EEPROM memory. Digital process monitor is built into industrial standart box, which is intended to panel mounting into switch board. Terminal strip is located on the rear side of device. Red display is default, on customer request is green display possible.</p>	

NOTICE	
<ul style="list-style-type: none"> o device can be operated on both AC or DC power supply, without any consideration about polarity when DC is used o Safety requirements for electrical devices: <ul style="list-style-type: none"> ▪ due ČSN EN 61010-1 + A2 ▪ class II 	

ORDER CODE	
DMP 01 -	
A B C D	
A	Pwr. supply 1 – 24 VAC / VDC , -15 to +20 %
B	Relays outputs
	0 – without relays outputs
	1 – 2 relays outputs 2 – 4 relays outputs
C	Analogue output
	0 – without analogue output 1 – with analogue output
D	Excitation power supply
	0 – without excitation power supply
	1 – exc.power supply 24 VDC @ 30 mA 2 – exc.pwr. supply 24 VDC @ 130 mA

ORDER EXAMPLE	
DMP 01 – 1110	
-	power supply 24 VAC / VDC
-	2 relays outputs
-	with analogue output
-	without excitation power supply

