



# PICA100-P

PROCESS

## DESCRIPTION

PICA100-P, instrument of the KOSMOS series, size 1/32 DIN with 4 digits LED red 8 mm high, designed for measuring process signals in range from 0 to 10 V, 0 to 20 mA, 4 to 20 mA with power supply for the transducer incorporated, easily scalable in engineering units, via keyboard or field signal.

Incorporates others inputs, from 0 to 60 Vdc that allows voltages measurements like batteries of 12, 24 or 48 V and from 0 to 100 mV adequate for connection with Shunts of 50, 60 or 100 mV that allows measurements of tensions up to  $\pm 2000$  A. Its two supply ranges makes it useful for industrial applications like installations with batteries. For this reason, it is very useful equipment for nautical applications especially for measurement and control of batteries or tanks of irregular shape thanks to the linearization of ramps option incorporated on this instrument.

Its two mounted relays allows this instrument not only to measure but also to be able to control, regulate and detect alarms for the mentioned signals.

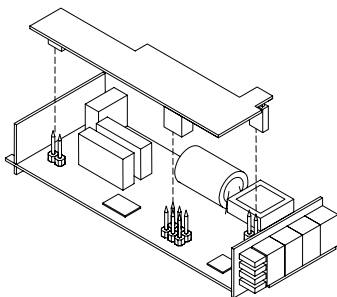
Tanks to its communication option RS4P (RS485) it can be integrated within a measurement system and is able to provide information via its MODBUS-RTU protocol, and can be totally configured by PC with a free el software available in [www.ditel.es](http://www.ditel.es)

Incorporates three keys located on the front bottom for the configuration of all the parameters.

Its brightness level is programmable with 4 levels in order to adapt it to the environment where it works. Registers the minimum and maximum process value since its commissioning or resetting. Offers the possibility to make a tare (display value absorption) that can be locked out at any time.

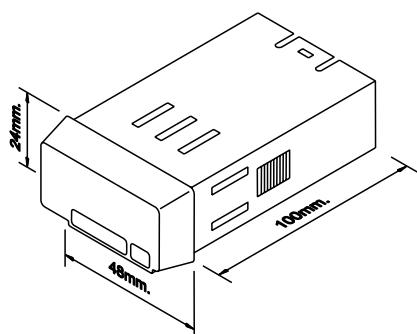
The output options are isolated from the input and the power supply.

## STRUCTURE



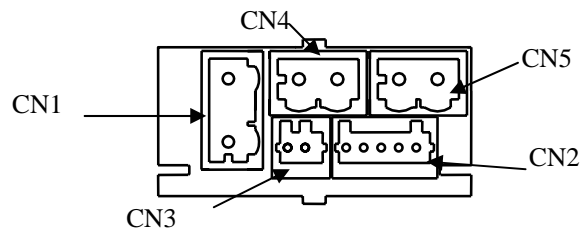
## SIZE

- Dimensions ..... 48 x 24 X 100 mm
- Panel cut out ..... 45 X 22 mm



## CONNECTIONS

REAR VIEW



CN1	POWER SUPPLY		
PIN	AC VERSION	DC VERSION	
1	AC Phase	+VDC	
2	AC Neutre	- VDC	
CN2	INPUT SIGNAL		
	PROC.	VOLT	mV
1	+ 10 V	+ 60 V	
2	+ mA		
3			+ mV (Shunt)
4	- Signal / - Exc.		
5	+ Exc. (20 V)		
CN3	OUTPUT RS 485		
1	TxD+ / RxD +		
2	TxD- / RxD -		
CN4	RELAIS 1		
1	SPST N.O.		
2			
CN5	RELAIS 2		
1	SPST N.O.		
2			

# PICA100-P

## TECHNICAL SPECIFICATIONS

### INPUT SIGNAL

- Configuration ..... asymmetric differential

Process input	Voltage	Current
---------------	---------	---------

- |                        |                                      |                |
|------------------------|--------------------------------------|----------------|
| • Voltage.....         | $\pm 10$ V DC                        | $\pm 20$ mA DC |
| • Resolution max. .... | 1 mV                                 | 1 $\mu$ A      |
| • Input impedance..... | 1 M $\Omega$                         | 12,1 $\Omega$  |
| • Excitation.....      | 20 V $\pm$ 5 V @ 30 mA               |                |
| • Error max .....      | $\pm$ (0.1% of the reading +1 digit) |                |

### Volts / millivolts input

- |                        |  |
|------------------------|--|
| • Voltage.....         | $\pm 60$ V, $\pm 10$ V, $\pm 100$ mV           |
| • Resolution max ..... | 10 mV, 1 mV, 0,1 mV                            |
| • Input impedance..... | 1 M $\Omega$ , 100 k $\Omega$ , 100 M $\Omega$ |
| • Error max .....      | $\pm$ (0.1% of the reading +1 digit)           |

### MAX applicable input signal

- |  |             |
|--|-------------|
| • Process mA .....                               | $\pm 24$ mA |
| • Process V.....                                 | $\pm 12$ V  |
| • Volts .....                                    | 60 V        |
| MAX. continuous Overload 60 V, 10 V inputs ..... | 80 V        |
| MAX. continuous Overload mV input .....          | 50 V        |
| MAX. continuous Overload V mA input .....        | 50 mA       |

### DISPLAY

- Principal..... -1999/ +9999, 4 digits 8 mm
- Decimal point..... programmable
- LEDs..... 2 for functions and 2 for outputs
- Display rate .....
- Overflow indication..... *-ouE ouE*

### CONVERSION

- |                                |                       |
|--------------------------------|-----------------------|
| • Technique.....               | Sigma/ Delta          |
| • Resolution.....              | ( $\pm 15$ bit)       |
| • Rate .....                   | 25/s                  |
| • Temperature coefficient..... | 100 ppm/ $^{\circ}$ C |
| • Warm up time.....            | 15 minutes            |

### RELAYS

- 2 SPST Relays (included)..... 5 A @ 250 Vac /30 Vdc

### POWER SUPPLY

- PICA100-P..... 85 VAC – 265 VAC / 100 VDC – 300 VDC
- PICA100-P6..... 21 VAC – 53 VAC / 10,5 VDC – 70 VDC

### FUSES (DIN 41661) - Not included

- PICA100-P..... F 0.2 A / 250 V
- PICA100-P6..... F 1 A / 250 V

### FILTER P

- Cut-off frequency..... 0.4 Hz to 0.004 Hz
- Slope .....

### ENVIRONMENTAL

- Operating temperature..... -10  $^{\circ}$ C to +60  $^{\circ}$ C
- Storage temperature .....
- Relative humidity non condensed..... <95 % @ 40  $^{\circ}$ C
- Max. altitude .....
- Sealed front panel..... IP65

### DIMENSIONS

- Dimensions .....
- Panel cut out .....
- Weight .....
- Case material .....

PICA100-P / PICA100-P6 can be supplied with the RS4P option assembled.

### ORDERING REFERENCES

- Universal power supply ..... **PICA100-P**
- Universal power supply + RS4P ..... **PICA104-P**
- Low voltage power supply ..... **PICA100-P6**
- Low voltage power supply + RS4P ..... **PICA104-P6**