



KOSMOS

DIGITAL PANEL METERS



**THE BROADEST OFFER OF
DIGITAL PANEL METERS
FOR THE INDUSTRIAL MARKET**

Our range of digital instruments **KOSMOS** is designed for supervision and control of industrial processes. Our instruments are suitable for almost any kind of measurements.

- Ammeters
- Chronometers
- Counters
- Torque
- Flow
- Mass Flow
- Displacement
- Force
- Frequency meters
- Humidity
- Inclination
- Level
- Ohmmeter
- Industrial weighing
- Position
- Pressure
- Tachometer
- Temperature
- Totalizer
- Voltmeter
- etc...



Thanks to their modular design, they can be equipped with optional plug-in output options, for different control purposes or/and communication with any global process in different protocols, such as:

- Analog Outputs
- Relays/Optos Outputs
 - BCD
- RS232 (ASCII / MODBUS RTU)
- RS485 (ASCII / MODBUS RTU)
- ETHERNET (MODBUS TCP)

All our meters benefit with the 5 years DITEL Warranty



The numerous industrial applications covered by our digital instruments **KOSMOS** can be found in sectors such as:

- Logistics
- Packing / Bottling
- Food / Agry-Food
 - Automotive
 - Energy
 - Chemical
- Manufacturing
 - Weighing
- Fluids management
- Ceramic furnaces
 - Cold Storage
- Machine-tools
 - Cranes
 - etc...



Do not hesitate to contact our technical support team, they will offer you the most adequate solution to your particular application.



Model	PICA40	PICA	PICA104	PICA101	PICA100	JU
Front view						
Format	48x24x40mm	48x24x70mm	48x24x100mm	48x24x100mm	48x24x100mm	96x48
Digits	-1999/9999	-1999/9999	-1999/9999	-1999/9999	-1999/9999	-9999
Resolution	±15 bits	±15 bits	±15 bits	±15 bits	±15 bits	±1
Readings	62/s	25/s	25/s	25/s	25/s	2

Load Cell	mV / V					J		
	± 10 VDC							
Process	± 20 mA	PICA40-LP (*)	PICA-P	PICA104-P	PICA101-P	PICA100-P	J	
	Potentiometer							
Temperature	Pt100 (0,01 °C)							
	Pt1000							
	Pt100							
	Thermocouple J		PICA-T				J	
	Thermocouple K							
	Thermocouple T							
	Thermocouple R							
	Thermocouple S							
	Thermocouple E							
Thermocouple N		PICA-T				J		
Electrical Variables	Ohmmeter						J	
	Ampmeter DC	PICA40-ADC	PICA-P	PICA-E	PICA104-P	PICA101-P	PICA100-P	J
	Voltmeter DC	PICA40-VDC (**)						JR-P
	Ampmeter AC		PICA-E					J
	Voltmeter AC							
	Fréquencymeter		PICA-F	PICA104-F	PICA101-F	PICA100-F	J	
Pulse Input	Tachometer						J	
	Totalizer							
	Counter							
Repeater	Chronometer							
	RS485							
Ethernet								
POWER SUPPLY	115 / 230 VAC							
	10-30 VDC							
	24 /48 VAC							
	85-265VAC/100-300VDC		PICA-_	PICA104-_	PICA101-_	PICA100-_		
	21-53VAC/10-70VDC		PICA-_6	PICA104-_6	PICA101-_6	PICA100-_6		
	10-30 VDC (Non isolated)	PICA40-ADC						
	11-265VDC/20-265VAC						J	
	20-265 VAC/VDC							

(*) 4-20mA loop powered

(**) 3 digits display powered by measured voltage

OUTPUT OPTIONS	1 Relay SPDT 8A						
	2 Relays SPDT 8A						
	4 Relays SPST 5A			INCLUDED (SPST 5A)			
	4 Optos NPN/PNP						
	Analog. 0-10V/4-20mA						
	Analog. 4-20mA						
	Analog. 0-10V						
	BCD Parallel						
	RS232C						
	RS485						
	RS485 (PICA)			INCLUDED			
	Analog. 0/4-20mA (PICA)				INCLUDED		
	ETHERNET						
	4-20mA Generator						

JUNIOR	JUNIOR20	IDEAL-P	MICRA	ALPHA	BETA	BETA-MP	GAMMA
							
3x60mm	96x48x60mm	96x48x60mm	96x48x60mm	96x48x120mm	96x48x120mm	96x48x120mm	96x48x120mm
9/9999	-1999/9999	-9999/9999	±39999 99999 (Micra-D)	±32000 99999 (Alpha-D)	±99999 99999999 (Beta-D)	±99999 999999	±9999
5 bits	±15 bits	±15 bits	±15 bits	24 bits ΔΣ	24 bits ΔΣ	24 bits ΔΣ	±15 bits
20/s	20/s	20/s	20/s	18/s	18/s	18/s	555/s

R-C	JR20-C			ALPHA-C			
R-P	JR20-P	IDEAL-P	MICRA-M	ALPHA-P	BETA-M	BETA-MP	GAMMA-M
R-P	JR20-P	IDEAL-P	MICRA-M	ALPHA-T	BETA-M	BETA-MP (BETA-M + 8 programmable memories of total configuration)	
R-P	JR20-P	IDEAL-P					
R-E	JR20-E						
JR-E	JR20-P	JR20-E	IDEAL-P	MICRA-E (TRMS)			
R-E	JR20-E						
R-D	JR20-D		MICRA-D	ALPHA-D	BETA-D		
			MICRA-X MICRA-NE				
				ALPHA-_ ALPHA-_1 ALPHA-_2	BETA-_ BETA-_2	BETA-MP BETA-MP2	GAMMA-M GAMMA-M1 GAMMA-M2
			MICRA-_ MICRA-_6				
R-_ JR20-_ IDEAL-P							

		INCLUDED	
2RE			2RE 4RE 40P / 40PP ANA
		INCLUDED	NMA NMV
			BCD (Not available on BETA-D) RS2 RS4
			ETH
		INCLUDED	

MICRA

TRICOLOUR MULTIFUNCTION



MICRA Series is our multifunctional line of meters beyond compare. Their tricolor LED display **GREEN ORANGE RED** can be used to control the status of measurement (**GOOD AVERAGE BAD**), or to differentiate a kind of measurement from another. This serie can respond to a large variety of industrial applications, specially when adding output options: visualization, control, data retransmission, digital communication, etc...

MICRA-M

- Process (10V, 20mA)
- Potentiometer
- Temperature (Pt100, TC J,K,T)
- Load Cell (mV/V)

MICRA-D

- Frequencycounter
- Tachometer
- Totalizer
- Counter
- Chronometer

MICRA-E

- Ammeter
AC (TRMS) / DC
- Voltmeter
AC (TRMS) / DC

MICRA-X

- Repeater ASCII & MODBUS
- RS485

MICRA-NE

- Repeater MODBUS TCP
- ETHERNET

- **2RE** : 2 Relays Output
- **4RE** : 4 Relays Output
- **40P/OPP** : 4 PNP/NPN Output

- **NMA** : 4-20mA Output
- **NMV** : 0-10V Output
- **ETH** : Ethernet Communication

- **RS2** : RS232 Communication
- **RS4** : RS485 Communication

JUNIOR

UNIVERSAL POWER SUPPLY MULTI-INPUT



14mm



20mm

New JUNIOR Series to suit easily and economically simple display and control applications . Easy implementation and universal power supply are the highlighted features of these top quality meters.

Display available with 14mm (JR models) or 20 mm high digits (JR20 models)

JR-P

- Process
- Temperature
- Ohmmeter
- Potentiometer

JR-D

- Frequencycounter
- Tachometer
- Totalizer
- Counter

JR-E

- Ammeter AC/DC
- Voltmeter AC/DC

JR-C

- Load Cell

- **2RE** : 2 Relays Output
- **ACK100** : DIN Rail Adapter

IDEAL-P

ALL IN ONE



The IDEAL-P indicator with standard 96x48 format, offers all the features that your process demands. Its ease of use, its universal power supply, and its economic cost, will make of IDEAL-P your benchmark indicator.

- $\pm 10V$, $\pm 200V$, $\pm 20mA$
- Pt100, TC J-K-T-N
- White LED
- 1 Relay 8A SPDT Alarm
- 4-20mA Output
- Re-copy
- Setpoint generator
- Universal Power Supply

ALPHA-BETA-GAMMA

HIGH PERFORMANCE



To suit the most demanding process applications, DITEL offers a complete range of high performance digital meters. These meters provide accurate and fast response solutions required in supervision and control of industrial processes. Their high capacity coupled with their high performance allows this range of digital panel meters to be considered one of the most complete solution for the industry.

ALPHA

18 readings/s | ± 32000 points

- ALPHA-C mV/V
- ALPHA-P $\pm 10V$, $\pm 20mA$
- ALPHA-T Pt100 TC J,K,T,R,S,E

18 readings/s | 99999 points

- ALPHA-D Counter, Tachometer, Frequencycounter Totalizer, Chronometer.

BETA

18 readings/s | Double Display | ± 99999 points

- BETA-M Multifunction input

18 readings/s | Double Display | 999999999 points

- BETA-D Counter, Tachometer, Frequencycounter, Totalizer

GAMMA

555 readings/s | ± 9999 points

- GAMMA-M mV/V , $\pm 10V$, $\pm 20mA$

- 2RE : 2 Relays output
- 4RE : 4 Relays output
- 4OP/OPP : 4 Optos PNP/NPN output
- ANA : 4-20mA / 0-10V output
- RS2 : RS232 Communication
- RS4 : RS485 Communication

PICA

LOW COST

PICA Series provide you with easy to use low cost meters in format 48x24mm adequate for downsizing equipment and control panels.

PICA40 LP



Loop powered
4-20mA

PICA



Standard
Display

PICA101



2 SPST Alarms
1 Re-copy 0/4-20mA
Sensor power supply 15 to 25V - 30mA



SPECIALISTS IN VISUALIZATION

DISTRIBUTOR

30738266B 02/11/2017

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