



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
- 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	JUNIOR	JUNIOR20	IDEAL-P	MICRA	ALPHA	BETA	BETA-MP	GAMMA				
	Front view																	
	Format	48x24x40mm	48x24x70mm	48x24x100mm	48x24x100mm	48x24x100mm	96x48x60mm	96x48x60mm	96x48x60mm	96x48x60mm	96x48x120mm	96x48x120mm	96x48x120mm	96x48x120mm				
	Digits	-1999/9999	-1999/9999	-1999/9999	-1999/9999	-1999/9999	-9999/9999	-1999/9999	-9999/9999	±39999 99999 (Micra-D)	±32000 99999 (Alpha-D)	±99999 99999999 (Beta-D)	±99999 999999	±9999				
	Resolution	±15 bits	±15 bits	±15 bits	±15 bits	±15 bits	±15 bits	±15 bits	±15 bits	±15 bits	24 bits ΔΣ	24 bits ΔΣ	24 bits ΔΣ	±15 bits				
	Readings	62/s	25/s	25/s	25/s	25/s	20/s	20/s	20/s	20/s	18/s	18/s	18/s	555/s				
Load Cell	mV / V							JR-C	JR20-C			ALPHA-C						
	± 10 VDC		PICA40-LP (*)	PICA-P	PICA104-P	PICA101-P	PICA100-P	JR-P	JR20-P	IDEAL-P	MICRA-M	ALPHA-P	BETA-M	BETA-MP	GAMMA-M			
Process	± 20 mA																	
	Potentiometer																	
Temperature	Pt100 (0,01 °C)																	
	Pt1000																	
	Pt100		PICA-T						JR-P	JR20-P	IDEAL-P	MICRA-M	ALPHA-T	BETA-M	BETA-MP (BETA-M + 8 programmable memories of total configuration)			
	Thermocouple J																	
	Thermocouple K																	
	Thermocouple T																	
	Thermocouple R																	
	Thermocouple S																	
Thermocouple E																		
Thermocouple N	PICA-T						JR-P	JR20-P	IDEAL-P									
Electrical Variables	Ohmmeter	PICA40-ADC PICA40-VDC (**)	PICA-P	PICA-E	PICA104-P	PICA101-P	PICA100-P	JR-E		JR20-E			MICRA-E (TRMS)					
	Ampmeter DC							JR-P		JR-E						JR20-P		JR20-E
	Voltmeter DC															MICRA-D	ALPHA-D	BETA-D
	Ampmeter AC		PICA-E															
	Voltmeter AC		PICA-F		PICA104-F		PICA101-F		PICA100-F									
Pulse Input	Fréquencymeter																	
	Tachometer							JR-D	JR20-D									
	Totalizer																	
	Counter																	
Repeater	Chronometer																	
	RS485										MICRA-X							
	Ethernet										MICRA-NE							
POWER SUPPLY	115 / 230 VAC											ALPHA-_	BETA-_	BETA-MP	GAMMA-M			
	10-30 VDC											ALPHA-_1			GAMMA-M1			
	24 /48 VAC										ALPHA-_2	BETA-_2	BETA-MP2	GAMMA-M2				
	85-265VAC/100-300VDC		PICA-_	PICA104-_	PICA101-_	PICA100-_				MICRA-_								
	21-53VAC/10-70VDC		PICA-_6	PICA104-_6	PICA101-_6	PICA100-_6				MICRA-_6								
	10-30 VDC (Non isolated)	PICA40-ADC																
	11-265VDC/20-265VAC							JR-_	JR20-_									
	20-265 VAC/VDC									IDEAL-P								

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
- ALPHA-D 18 readings/s | 99999 points
Counter, Tachometer, Frequencycounter
Totalizer, Chronometer.

BETA

18 readings/s | Double Display | ± 99999 points

- BETA-M Multifunction input
- BETA-D 18 readings/s | Double Display | 999999999 points
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



DITEL

SPECIALISTS IN VISUALIZATION

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