

# **Analog input. Process control.**



**57 mm high digits. Industrial environment  
Readable from up to 25m  
1 or 2 displaying sides.**

## Application field

They are most often used to show any instrument analog output voltage in the range  $\pm 10V$  (0-10V, 0-5V, 0-1V, 1-5V), or analog output current in the range  $\pm 20mA$  (0-1mA, 0-5mA, 0-20mA, 4-20mA). They are easily configurable with 3 pushbuttons or with a PC if the serial line option is present. But, because they are scalable, they can be used to show any physical measurement in your process.

All equipment is factory completely calibrated with data stored in non erasable memory without use of adjustment potentiometers

## Colour option

Available for models DN-109 and DN-119. It lets you to choose the display colour depending on the input value. The valid colours are: Red, green and yellow.



## Serial line option

The serial line option (RS-232C/RS-485) lets you to program or to read actual display value. The available parameters are: Baud rate, Parity, Data bits, Stop bits and Display address.

## Dual relay output option

Two programmable relay output are available. Selectable HI or LO . Delay time or hysteresis adjustable.

## Option to display the measures units

Several measure units can be permanently displayed: Kg, Tm, °C, mV, m/s, l/s, or any other unit, as the consumer desires, up to three characters.

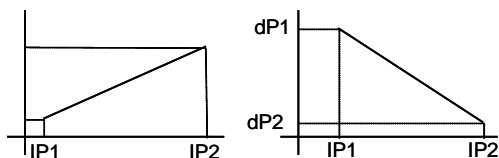
## General specifications

Power supply	88 to 264 VAC 47 to 63Hz.
Case material	Aluminum extruded
Mounting	Wall or suspension
Display	Color red or red/green/yellow
Frontal	Methacrylate
Back	PVC
Operating temperature	-20° to 60°C
Protection level	IP41 (option IP65)

## Display format

	3 Digits	4 Digits	5 Digits
Resolution	-199/999	-1999/9999	-19999/99999
Overrange	-OE / OuE	-OuE / OuE	-OuE/OuE

## Direct or inverse relation



## Analog / digital converter

A/D conversion technique	Sigma-Delta
A/D conversion resolution	16 bits
A/D conversion rate	25/ s

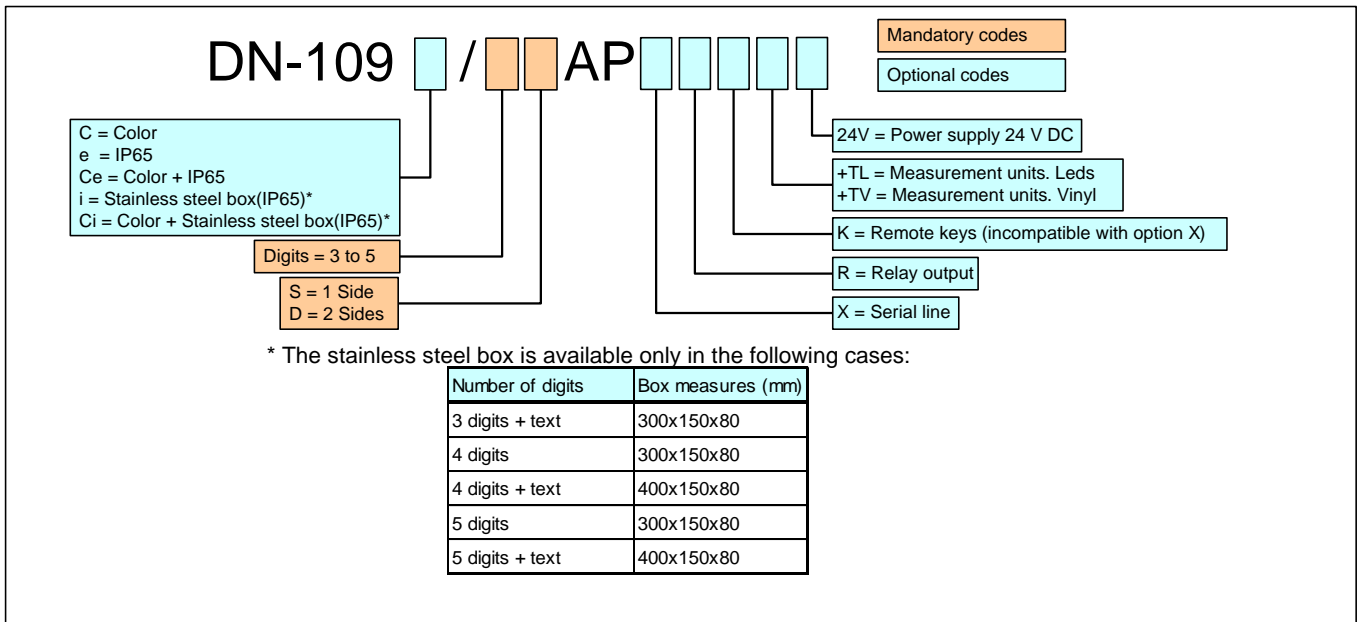
Input signal	Voltage	Current
Range	$\pm 10V$ DC	$\pm 20mA$ DC
	0 - 1V	0 - 1 mA
	0 - 5V	0 - 5 mA
	1 - 5V	0 - 20 mA
	0 - 10V	4 - 20 mA
Resolution	0,5 mV	5 $\mu A$
Input impedance	1 M Ohm	12.1 Ohm
Maximum error	$\pm(0,1\% \text{ reading} + 3 \text{ digits})$	
Temperature coefficient	100 ppm / °C	
Warmup time	5 minutes	
Excitation output	24V DC 100 mA	

## Dimensions

Digits	3	4	5
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<b>DN-109</b>	<b>High = 122mm</b>		<b>Depth = 120mm</b>	
Width in mm	288	288	288	
Width + Text option	288	336	382	

## Reference composition



## EXAMPLES:

### DN-109/4DAP

Process input signal 4 digits display DN-109 of two sides.

### DN-109Ce/3SAP

3 Digits, DN-109 series, one side.

Red/green/yellow colour display digits. Protection degree IP65.

### DN-109e/5SAP+TL rpm

Process input signal 5 digits display DN-109 of one side.

Text leds option. Text: rpm.

Protection degree IP65.