

Analog input. Process control.



**180 mm high digits. Industrial environment
Readable from up to 90m
1 o 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

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	230V AC($\pm 10\%$)
Case material	Aluminum extruded
Mounting	Wall or suspension
Display	Color red or red/green/yellow
Frontal	Methacrylate
Back	PVC
Operating temperature	0° a 50°C

Analog / digital converter

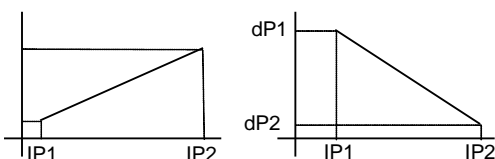
A/D conversion technique	Sigma-Delta
A/D conversion resolution	16 bits
A/D conversion rate	25/ s

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

Display format

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

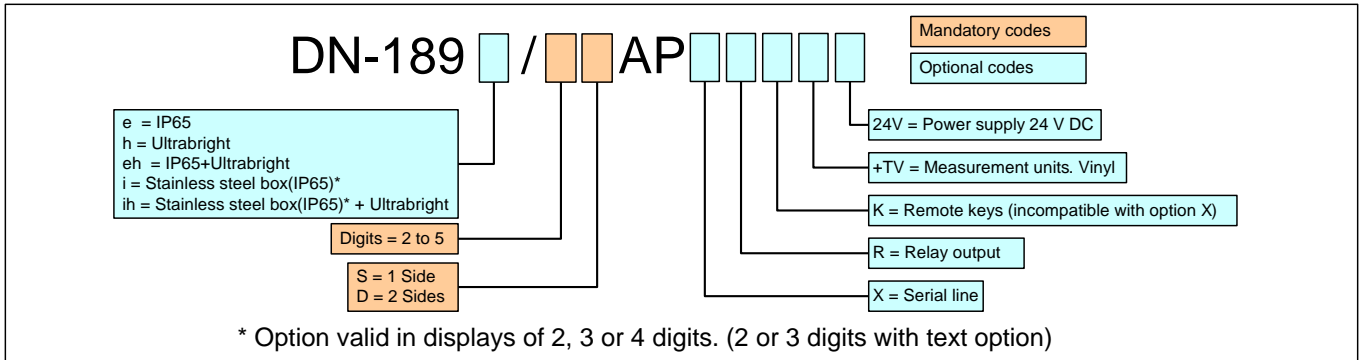
Direct or inverse relation



Dimensions

Digits	2	3	4	5
DN-189	High = 251mm		Depth = 120mm	
Width in mm	340	500	660	820
Width + Text option	660	820	980	1140

Reference composition



EXAMPLES:

DN189/4DAP

Process input signal 4 digits display DN-189 of two sides.

DN189e/3SAP

3 Digits, DN-189 series, one side.
Protection degree IP65.

DN189e/5SAP+TV rpm

Process input signal 5 digits display DN-189 of one side.
Text vinyl option. Text: rpm.
Protection degree IP65.