

# NP4

- COMPACT PROGRAMMABLE CONTROLLER (NANOPAC)
- ON BOARD I/O
- EXPANSION CAPABILITIES



## FEATURES

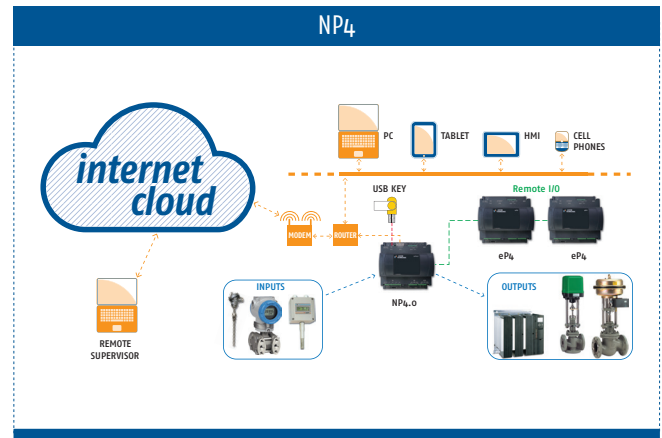
INPUTS	
	<b>NP4</b>
	Configurable between: 0/1... 5 V, 0/2... 10 V, 0/4... 20 mA, TC (J, K, L, N, R, S, T), PT100 (2 wires), PT1000, NTC (103AT-2), Potentiometer, 5 V Ratiometric
4 Universal Analogue	16 bit resolution Accuracy 0,1% of span (linear), 0,2% (temperature) Input Impedance >100 kΩ, <200 Ω (mA) Insulation 800 V between analogue channels and power supply, digital I/Os and serial comms ports (insulated version)
8/16 + 2 Digital	8 (16 I/O mix) sink type IEC61131-2 type 3 2 input sink type IEC61131-2 type 3 for counters and frequency (5 kHz max) Protection: reverse polarity and overvoltage Insulation 800 V between digital channels, power supply, analogue I/Os and serial comms ports (isolated version)
OUTPUTS	
0/2/4 Analogue	Configurable 0/1... 5 V, 0/2... 10 V, 0/4... 20 mA 12 bit resolution Accuracy 0.1 % full scale Insulation 800 V between analogue outputs and power supply, analogue inputs, digital I/Os and serial comms ports (isolated version)
8/16 Digital	8 (16 I/O mix) high-side output 0.7 A each Insulation 800 V between digitals and power supply, analogue I/Os and serial comms ports (isolated version)
4 Relay/SSR Drive	Relay 2 A, 240 Vac, or SSR Drive max 20 mA, 12V Protection: Overvoltage Insulation 2500V (Relay), 800V SSR Drive with respect power supply, analogue & digital I/Os and serial comms ports (isolated version)
SERIAL PORTS AND COMMUNICATION	
Ethernet	Ethernet port 10/100 MB
0/1/2 Serial	1 RS232/485 + 1 RS485 (optional/ insulated)
USB	Micro USB AB type (HOST)
Protocol	Modbus TCP Server, Modbus RTU (Master e Slave), ASCII
FUNCTIONAL	
Processor	ARM Cortex M7 32 bit, 216 MHz
Memory	16 MB Flash, 32 MB SDRAM, 128 kB MRAM
Programming	Standard languages IEC 61131-3 compliant: IL, ST, FBD, LD, SFC, CFC
Real Time Clock	Back-up battery on board (rechargeable)
GENERALS	
Power Supply	24 Vdc (-15... +25%)
Power consumption	12 W
Dimensions / Weight	105 x 110 x 60 mm (WxHxD) 6 DIN module / 512 g
Mounting	On Omega DIN A rail
Protection	IP 20
Operating/storage temperature	-20... 50 °C (-4... 122 °F) / -40... 70 °C (-40... 158 °F)
Operating Humidity	5... 95 RH% without condensation

## HOW TO ORDER

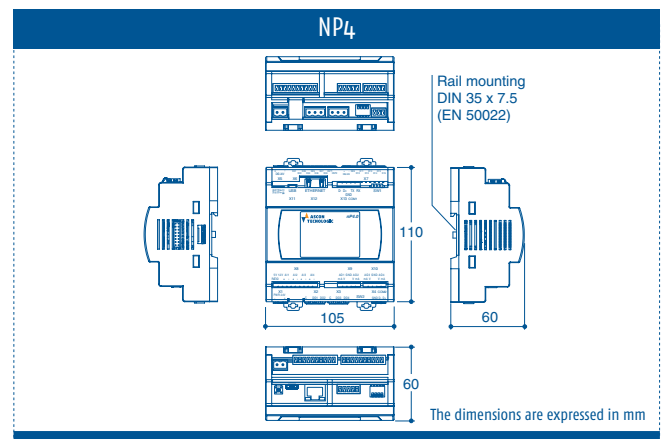
To compose the part number, pls. choose one of the option for each variable

NP4	CODE
<b>DISPLAY</b>	
Without display	-
Display LCD 128 x 64 dot (not available yet)	D
<b>DIGITAL OUTPUTS</b>	
Not provided	-
2 Relay DO + 2 SSR drive DO	M
4 Relay DO	R
4 SSR drive DO	S
<b>ANALOGUE INPUTS</b>	
Not provided	-
4 universal inputs	4
4 universal & ratiometric inputs	5
<b>ANALOGUE OUTPUTS</b>	
Not provided	-
2 ch. not isolated	2
2 isolated modules with 2 analogue ch. each	4
<b>DIGITAL INPUTS</b>	
8DI + 8DO + 2 DI for counter and Frequency	88
16 Digitals (config. as IN or OUT) + 2 DI counter/Frequency	16
<b>FIELDBUS</b>	
Ethernet	E
<b>COMMUNICATION PORTS</b>	
Not available	--
RS232/485	1S
RS232/485 isolated	1I
RS232/485 + RS485 isolated	2S
RS232/485 isolated + RS485 isolated	2I
RS485 isolated	4I
<b>CASE COLOUR</b>	
Grey	G
White	W

## CONNECTIONS



## DIMENSIONS



- INDUSTRIAL CONTROLLERS
- ADVANCED PROGRAMMER CONTROLLERS
- DIN RAIL MOUNTING CONTROLLERS
- THERMOSTATS ANALOGUE CONTROLLERS
- SPECIAL CONTROLLERS AND "CUSTOM"
- PAC SYSTEMS
- PRE-PROGRAMMED SYSTEMS
- PLC AND OPERATOR PANELS
- TIMERS COUNTERS POWER LIMITERS
- INDICATORS
- I/O MODULES
- SUPERVISION
- COMBUSTION CONTROL
- ACCESSORIES