EP4

- **EXPANSION UNITS FOR SIGMAPAC AND NANOPAC PROGRAMMABLE CONTROLLERS**
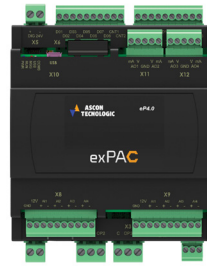
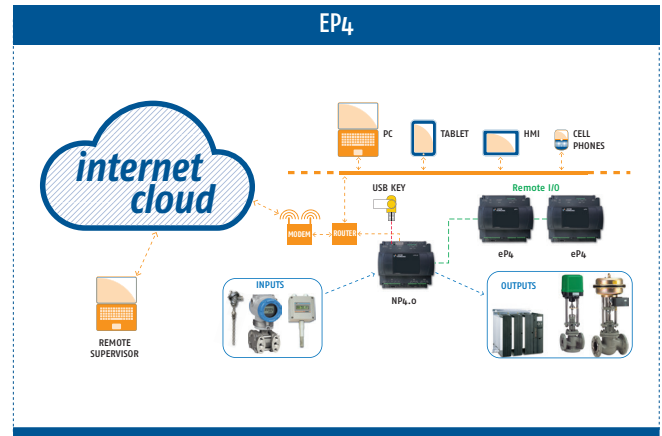## FEATURES

INPUTS	EP4
0/4/8 Universal Analogue	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
	16 bit resolution
	Accuracy 0,1% of span (linear), 0,2% (temperature)
	Input Impedance >120 kΩ, <200 Ω (mA)
	Insulation 800 V between analogue channels and power supply, digital I/Os and serial comms ports (isolated version)
8/16 + 2 Digital	8/16 (I/0 version) sink type IEC611131-2 type 3
	2 input sink type IEC611131-2 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/0 version) 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	
Communication port	1 SPI + 1 RS485 (optional, isolated)
Protocol	Proprietary protocol for local expansion, Modbus RTU (Slave)

FUNCTIONAL	
Processor	ARM Cortex 32 bit

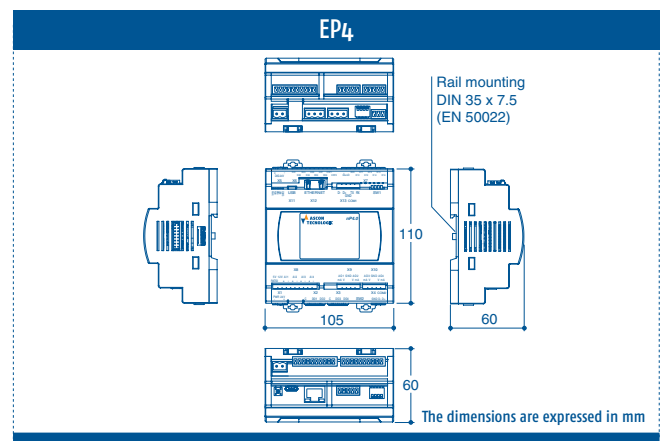| GENERALS	
Power Supply	24 Vdc (-15… +25%)
Power consumption	12 W
Dimensions / Weight	WxHxD. 105 x 110 x 60 mm (6 DIN module) / 512 g
Mounting	On Omega DIN A rail
Protection	IP 20
Operating/storage temperature	-20… 50°C (-4… 122°F) / -40… 70°C (-40… 158°F)
Operating Humidity	5… 95 RH% without condensation

HOW TO ORDER

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

SIGMA2 – EP4	CODE
DISPLAY	
Without display	–
DIGITAL OUTPUTS	
Not provided	–
2 Relay DO + 2 SSR drive DO	M
4 Relay DO	R
4 SSR drive DO	S
ANALOGUE INPUTS	
Not provided	–
4 universal inputs	4
8 universal inputs	8
ANALOGUE OUTPUTS	
Not provided	–
1 Module with 2 ch. not isolated	2
2+2 Modules with 2 analogue ch. (isolated from each other)	4
DIGITAL INPUTS	
Not provided	– –
8DI + 8DO + 2 DI CNT	88
16 configurable + 2 DI CNT	16
FIELDBUS	
Not available	–
RS485 Modbus RTU Slave	M
COMMUNICATION PORTS	
SPI port only	– –
RS485 isolated (with Modubus RTU Slave only)	4I
CASE COLOUR	
Grey	G
White	W

CONNECTIONS

EP4

DIMENSIONS

EP4

Rail mounting
DIN 35 x 7.5
(EN 50022)

110

105   60

60

The dimensions are expressed in mm