

## DISPLAY STRAIN GAUGE CONDITIONER : SX 6504 SERIES



Signal input selection  
 Indication in engineering unit  
 Signal linearisation by 11 lines  
 3 filter levels  
 TARE key  
 Function control by front panel key and logic input  
 Sensor excitation  
 Communication & control option



### GENERAL DESCRIPTION

The Alpha C (APC) display-conditioner features are :

- Strain gauge signal conditioning
  - Programmable scaling in engineering units between -1999 & +9999
  - 12 points max. linearisation
  - Several filter levels : balanced, damping & round-up
  - Built-in power supply for the sensor
  - Optional control cards :
    - Analogue (4-20mA or 0/10VDC)
    - 2 thresholds / 2 relays
    - 4 thresholds / 4 relays
  - Optional communication cards :
    - Serial RS232
    - Serial RS485
  - Control of TARE, RESET, LIMIT, MAX/MIN functions by a key on the front panel.
- Other functions may be validated through logical inputs.

### SELECTION GUIDE

Reference	Description	Options	Options cumul
6504 <i>Sxi</i>	Strain gauge display conditioner APJ 230VAC 50/60Hz Power supply	2 thresholds relay 4 thresholds relay Analogue output RS 232 output RS 285 output	{ Yes choice of one Yes { Yes choice of one
6505	Strain gauge display conditioner 24VDC insulated Power supply	2 thresholds relay 4 thresholds relay Analogue output RS 232 output RS 485 output	{ Yes choice of one Yes { Yes choice of one

### GENERAL SPECIFICATIONS (AT 25°C)

Input signal	
Set-up	differential asymmetric
Max. voltage	± 300 mV DC
Max. resolution	0.5 µV
Input impedance	100 m Ω
Excitation	10 V (120 mA), 5V (120 mA)
Max. ground voltage	50 V
Installation category	II
Pollution level	

## GENERAL SPECIFICATIONS (AT 25°C)

### Accuracy

Max. error	$\pm 0.1\%$ / reading $\pm 2$ digits
Temp. Drift	100 ppm / °C
Heating time	10 min.

### Fuses

Alpha-C (230/115V AC)	F 0.2 A / 250 V
Alpha-C1 (10-30V DC)	F 2 A / 250 V

### Conversion

Technical	double ramp
Resolution	$\pm 16$ bits
Frequency	16 / sec.

### Display

Main display	- 32000 / + 32000, 5 red 14mm digits
Auxiliary display	1 green 7.62mm digit
Decimal point	programmable
LEDs	14 (programmation & output)
Display frequency	62ms
Positive over-range	+ oVFlo
Negative over-range	- oVFlo

### Power supply

Alternative	115 / 230 VAC, 50-60 Hz
Direct	10-30 VDC
Consumption	5 W (without option), 10 W (max)
Installation category	II
Pollution category	2

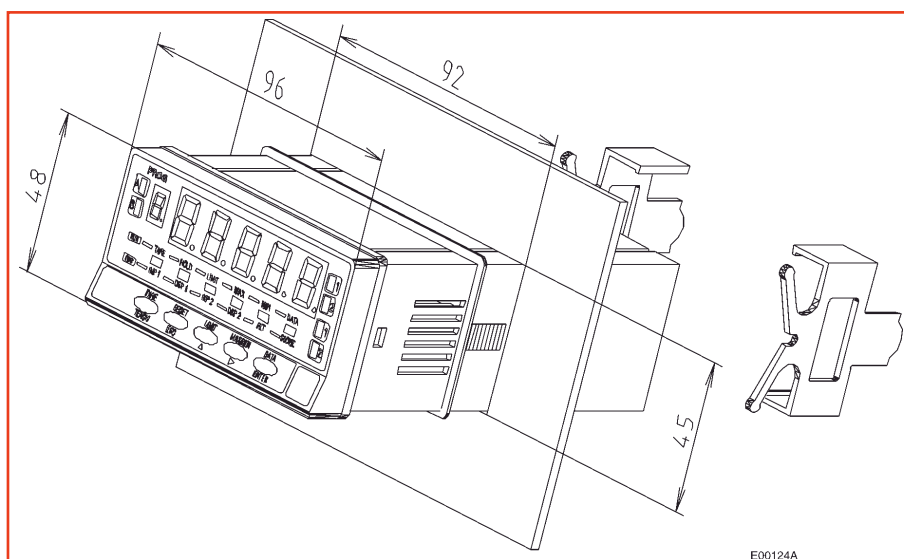
### Environment

Operating Temperature	- 10 to + 60 °C
Storage temperature	- 25 to + 85 °C
Relative humidity	< 95 % at + 40 °C
Altitude	2000 m

### Miscellaneous

Size	96 x 48 x 120mm
Panel cut-out	92 x 45 mm
Weight	600 g
Housing material	polycarbonate s/UL 94 V-0
Front panel protection	IP65

## INTERFACE DRAWING



E00124A