



- TWO INDEPENDENT CHANNELS
- PUSH BUTTON CALIBRATION
- RTD SENSOR INPUT
- DIGITAL DRIFT FREE LINEARISATION
- RE-RANGEABLE WITHOUT A PC
- HIGH DENSITY PACKAGING



DUAL CHANNEL PT100 DIN RAIL PUSH BUTTON TRANSMITTER SEM 523

INTRODUCTION

The SEM523/P is a dual channel DIN rail temperature transmitter which accepts any commonly available RTD sensor and converts it to 4-20 mA. The SEM523/P utilises the latest push button calibration technique which ensures quick and easy set-up and calibration without the need for soldering links, potentiometers or the use of a PC. The SEM523/P is the latest in our family of digital transmitters which provide enhanced performance at a low cost and, being a two channel unit, offers high packing density.

SPECIFICATIONS @ 20°C

INPUT

Input Type	3 wire PT100 sensor to BS EN 60751 optional: 3 wire Pt500 and Pt1000
Range	-200°C TO +850 °C
Min Span	20 °C
Max Lead Resistance	10R per leg
Lead Resistance Effect	0.04°C/ohm (excluding mis-match)
Sample Rate	500mS
Accuracy: -100°C to +500 °C	± 0.1°C ± 0.1% of rdg
-200°C to + 850°C	± 0.2°C ± 0.2% of rdg
Thermal Drift	Zero ± 0.01°C / °C: Span 50 ppm

OUTPUT

Output	4 to 20 mA 2 wire loop powered (Can be ranged 20 - 4 mA)
Operating Voltage	8 TO 30 V dc
Accuracy	± 5uA
Burnout	Up-scale 22 mA (Downscale to order)
Thermal Drift	Zero 0.2uA /°C Span 0.5uA/°C
Response Time	500mS to reach 70% of final value
Loop Resistance	700R at 24 V dc
Ripple Rejection	± 0.002 uA /V measure at 50Hz 1v peak to peak

GENERAL

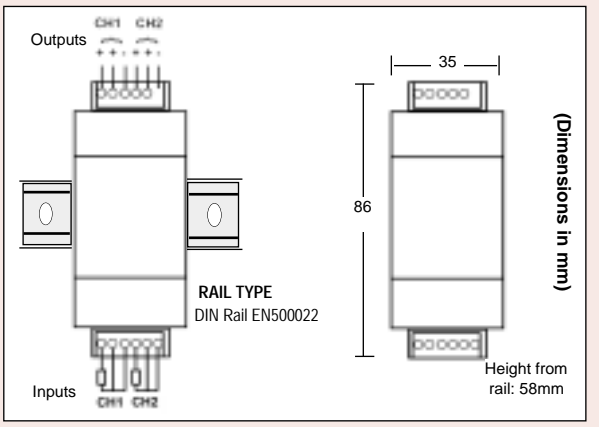
Channels	2 Independent
Channel 1 to 2 Isolation	500 V dc
Terminals	Two part screw terminal with rising clamp Max cable size 1.5 mm sq

Warm-up Time	2 minutes to full accuracy
EMC Conforms to	Emmissions BS EN50081-1 Susceptibility BS EN50082-2
Ambient Temp Range	0 to 70 °C
Ambient Storage	-40 to 70 °C
Ambient Humidity	0 to 95 % (Non condensing)
Calibration Period	12 Months to maintain published specification. Red LED indicates prog. mode/ out of range sensor
Display	

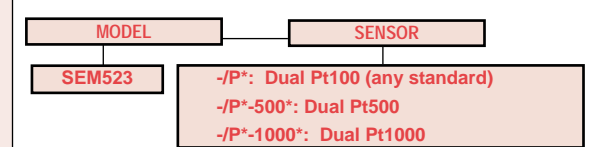
PHYSICAL

Enclosure	DIN Rail enclosure conforming to DIN 43 880
Top	Colour Grey Material Lexan™ Approval UL94- VO (self extinguishing)
Base	Colour Black Material Noryl Approval UL94- VO (self extinguishing)

MECHANICAL DETAILS



ORDER CODE



* All units supplied with Upscale Burnout, contact sales office for Downscale versions.

Every effort has been taken to ensure the accuracy of this specification, however we do not accept responsibility for damage, injury, loss or expense resulting from errors and omissions, and we reserve the right of amendment without notice.



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