SI3100

DM-SENSORS

New Instrument / Controller for use with LVDT Gauging Probes and Displacement Transducers



Features

2 LVDT inputs
Simple Menu System
Single channel Display
7 digit Colour Display (user selectable)
Analogue Display with auto coarse/fine resolution
Auto display colour change for in/out range
Peak hold facility
Discrete I/O for each transducer input
4-20mA or DC output
RS232 output
Front panel IP 65 protection

Description

The New SI3100 Controller is an instrument designed to maximise the performance of extensive range of LVDT Gauging Probes and Displacement Transducers. The instrument features an intuitive, menu-driven colour display which can be programmed to set limits or alarms and record other parameters.

Powered from a 24Vdc source, the SI3100 can be used to display one or two transducer readings, computed results from two transducers such as, A, B, A+B, A-B, (A+B/2), (A-B/2), and computations with constants, e.g. angle measurements.

Full set up is made via the IP65 protected front keypad that can, if required, be password protected. The SI 3100 also features discrete inputs/outputs and a selection of Analogue outputs in the form of 4-20mA or DC voltage.



Technical Specification

Product type	SI3100 - 2 Channel LVDT
Display type	Colour LCD display 40Hz update rate with 30° Viewing Angle
Display length (mm) Display length (inches)	XX.XXXXX X.XXXXXX
Resolution (µm)	Down to 0.05 μm or 0.000005"
Analogue Display	Colour Solid vertical bar
Transducer Excitation	LVDT
AC Primary Voltage (VAC rms)	3.0 V RMS
Primary Frequency (kHz)	5kHz or 10kHz
Signal Input (sensitivity range)	55mV to 500mV Full range
Input load resistance (k Ohm)	2k, 10k 100k
External input/output	
Serial	RS232 serial port (for printer or PC).
Discrete Output	six isolated discrete outputs (Channel A, Lo, OK, HI), (Channel B, Lo, OK, HI)
Analogue Output	2 Channels either configured 4-20mA or DC Voltage
Keypad	Membrane Keypad with 9 keys: Print, Zero, Up, Down Left, Right, Enter, Peak hold/Track, Menu.
Measurement configurations	
Data Logging	Not available
Number of transducer inputs	1 or 2 (user selectable)
Measurement type	A, B, A+B, A-B, (A+B)/2, (A-B)/2, (B-A/a)
Indications	Measurement Mode, Type of measurement, Lower and Upper Limits, Measurement out of Limits
Electrical	
Power supply (VDC)	+24 VDC +/- 10%
Mechanical and Enviromental	
Mounting	Bench Top or Panel mount options
Sealing	Front Panel IP65, Case IP51, Rear Connectors IP51
Mass	1.1kg
Temperature	Operating temperature from 0°C to +50°C storage between -20°C to +85°C
EMC	Immunity:EN6100-6-2:2001, Emissions: EN61000-6-3:2001
Dimensions	W x H x D(mm): 134 x 65 x 160 excluding bezel W x H x D(mm): 144 x 74 x 175 including bezel

Part Number	
Base Unit	911360
Unit with Setup	911381