

FSU-SSBD Fast Loadcell Digitiser



- ✓ 4800 samples per second
- ✓ 13 bit noise free resolution
- ✓ Capture up to 30 minutes of data
- ✓ Quick and easy connectivity via USB
- ✓ Toolkit software for simple use
- ✓ Traceable system calibration certificate

Specification

Parameter	Value	Unit
Bridge Excitation	4.5 (Min) / 5 (Typical) / 5.25 (Max)	Vdc
Loadcell Excitation System	4 wire	
Bridge Impedance	80 (Min) / 350 (Typical) / 5000 (Max)	Ohms
Bridge Sensitivity	-3 (Min) / +3 (Max)	mV/V
Offset Temperature Stability	1 (Typical) / 4 (Max)	ppm/°C
Gain Temperature Stability	3 (Typical) / 5 (Max)	ppm/°C
Offset Stability with Time	20 (Typical) / 90 (Max)	ppm of FR *
Gain Stability with Time	30	ppm of FR /1st Year
Non-linearity	5 (Typical) / 25 (Max)	ppm of FR
Internal Resolution	16 Million	Counts/Divisions
Resolution at 4.8kHz (Noise Stable) **	8192	Counts/Divisions
Resolution at 4.8kHz (Noise Stable) **	13	bit
USB cable length	5	m
Case dimensions	See diagram	
Operating temperature range	-40 (Min) / 85 (Max)	°C
Storage temperature	-40 (Min) / 85 (Max)	°C

Humidity	0 (Min) / 95 (Max)	%RH Non condensing
Protection	IP50	

The FSU-SSBD is a fast, compact, high precision loadcell input module delivering high resolution readings over USB and communicated directly to a PC.

It is aimed at dynamic applications that require high speed measurement. It delivers high speed measurements of 4800 samples per second at 13 bit noise free resolution. Simply by plugging the device into a PC, data can be measured from a loadcell using the FSU-SSBD for a wide range of high speed systems. This is achieved using the powerful Toolkit software to provide optimised, fast viewing of data. It allows the viewing of input status and module information, simple switching between engineering units as well as two part calibration, high speed navigation and FFT frequency component analysis. Data can be exported to a CSV file. This free-standing module is fitted with 9-way 'D' type socket for connection to the loadcell while a micro USB socket allows connection to a PC and does not require external power. A DIN rail mounting option is also available. If the FSU-SSBD is supplied with a loadcell it will normally be calibrated to read the loadcell output in the same force units as the loadcell calibration. A traceable system certificate will be supplied for the FSU and loadcell combination. Alternative calibrations are possible; please consult our engineering department to discuss your requirements.

Files

Type	Title	Download
PDF Manual	Printable manual.	Download

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