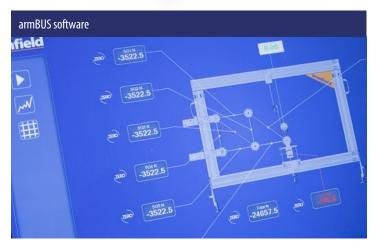
# <u>armfield</u>

### **Structures - SV series**





UK office - email: sales@armfield.co.uk tel: +44 (0) 1425 478781 (for ROW) USA office - email: info@armfield.inc tel: +1 (609) 208-2800 (USA only)



Issue: 1 Applications
URL: http://www.armfield.co.uk/structures ME CE IP
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### armfield.co.uk

### Description

The Armfield SV101 is a compact interface unit for the Armfield Structures range which can be placed in a convenient position beside the test equipment.

The unit provides direct integration between a compatible structures experiment and the Armfield armBUS software. Connection to the users computer is made through the front mounted USB socket.

On the clearly defined front panel there are thirteen sockets for connecting strain-gauges, three sockets for connecting 2kg load cells and two sockets for connecting 100kg load cells.

If required, the number of strain gauge and load cell sockets can be doubled by joining two consoles via the armBUS Multi Channel (ABMC) connection.

Requirements	Scale
JPhPCUSBSV100	<b>≈</b> ¶

Electrical supply: 110/120V, 60Hz or 220/240V, 50Hz

- SV100: Bench Mounted Frame ►
- ► PC with a USB port, running Windows 7 or above

#### **Essential accessories/equipment**

SV100: Bench Mounted Frame

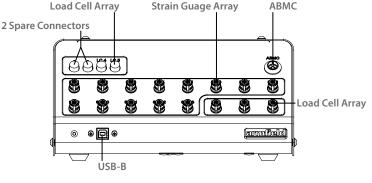
#### **Technical specification**

Structures Interface Connections

- Input voltage = 24VDC ►
- 13 x Strain gauges (SG) Snap-in connectors ►
- 2 x Load Cell (LC) 2kg load cells snap-in connectors
- ► 3 x Load Cell (LC) 100kg load cells threaded connectors
- ► **USB-B** connector
- ► 1 x ABMC connector armBUS Multi Channel connection
- DC jack (to rear)

Strain Guage Array

ABMC



### **Overall dimensions**

Length	0.304m			
Width	0.260m			
Height	0.132m			
Packed and crated shipping specifications				
Volume	0.048m <sup>3</sup>			
Gross weight	15kg			

## **Knowledge** base

> 28 years expertise in research & development technology > 50 years providing engaging engineering teaching equipment

Benefit from our experience, just call or email to discuss your laboratory needs, latest project or application.

#### Features / benefits

- ► Consoles can be daisy chained together
- ► Provides power for Load cells
- Provides data logging and connectivity up to 13 Strain gauges per unit

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#### **Related products**

#### Forces in a Truss

- SV200: Pin-Jointed Frameworks (Roof and Warren Truss)
- SV201: Forces in a Truss and Redundant truss
- ► SV202: Deflection of Trusses

#### Forces & Moments

- **SV300:** Combined Shear Force & Bending Moment Apparatus
- SV301: Shear Force in a Beam
- ► SV302: Bending Moments in a Beam
- SV303: Deflection of Beams and Cantilevers
- SV304: Equilibrium of Forces
- SV305: Suspension Cable
- **SV306:** Bending Stress in a Beam

#### Bridges, Beams, Arches, Cables

- ► SV400: Simple Suspension Bridge
- ► SV401: Deflection of a Frame
- SV402: Suspended Centre Span Bridge
- ► SV403: Three-Pinned Arch
- SV404: Two-Pinned Arch
- **SV405:** Semi-Circular Arch

#### Strength of Materials

- SV500: Continuous and Indeterminate Beams
- SV501: Plastic Bending of Beams
- ► SV502: Plastic Bending of Portals
- ► SV503: Deflection of Curved Bars

#### **Operational conditions**

- Storage temperature: -10°C to +70°C ►
- **Operating temperature range:** +10°C to +50°C
- Operating relative humidity range: 0 to 95%, non-condensing ►

#### Ordering codes

SV101: ► Structures Interface Unit (Sold separately)

#### Armfield standard warranty applies with this product



## Aftercare

Installation Commissioning Training Service and maintenance Support: armfieldassist.com