



## TYPE: DSJ1



# DSJ1 Single Channel DSC Docking Station

## Description

The DSJ1 is designed for use with strain gauge sensors and offers high speed and high precision signal conditioning digitising capabilities. Available output formats include RS232, RS485 ASCII, Modbus, & MantraCAN J1939.

The function of the DSJ1 is to enable the easy connection of a load cell and a DSC card for communications to a PC or PLC. Designed to take one DSC card in a single enclosure, the DSJ1 offers a convenient and practical solution to the installation of digital load cells within platforms, silos and other weighing systems where connection to PC and PLC's is required.

Supplied as an OEM device on a single 135 x 73mm PCB, it has options for fitting in an IP65 ABS case, or to a DIN rail fixture. When a DSC card is fitted to the DSJ1 PCB it will enable the connection of a load cell via a two-part connector, with a five-way two-part connector for the communications output or D type 9 pin connector, as well as connections for digital inputs and outputs and external temperature sensor.

For more than one input channel, model DSJ4 (see separate data sheet) provides the ability to connect up to four model DSC's to a common communications bus. Several DSJ1's or DSJ4's can be connected to the same bus for distributed applications (except when using RS232).

## Specification

Connections	1 x 8 way 2 part terminal for load cell and temperature sensor connections (2.5mm <sup>2</sup> cable max) 1 x 5 way 2 part terminal for digital data and power (2.5mm <sup>2</sup> cable max) 1 x 3 way 2 part terminal for DSC digital I/O 1 x 9 way D type connector for digital data
Dimensions	135 x 73 x 18mm (PCB only)
Environmental sealing	Sealed to IP65 with cable entries via IP67 glands (when supplied with optional enclosure)
Supply voltage	5.8 to 18V DC
Power	0.5 to 1.5 Watts
Link 1 & 5 connection	Select connections to D type, RS232 or CAN/RS485
Link 2	Provides 120R terminating resistor for CAN/RS485
Link 3	Selects on board temperature sensor or external device connected to J2
Link 4 connection	Connects digital output to output LED
Operating temperature range	-10 to +50°C
Storage temperature range	-20 to +70°C
Relative humidity	95% maximum non condensing
Cable size	Ø4 to 8mm
European EMC Directive	2004/108/EC
Low Voltage Directive	2006/95/EC

## Available Options

- ⊙ ABS enclosure
- ⊙ On board temperature sensor
- ⊙ Mounting alternatives - DIN rail option

## Features

- ⊙ Bus connections for communications and power supply
- ⊙ 2 part connectors for field terminals
- ⊙ D type 9 pin connector for easy communications connection
- ⊙ Green LED power indicator
- ⊙ Red LED digital output indicator
- ⊙ Push switch can be used to simulate digital input
- ⊙ Option to terminate bus through 120ohm resistor
- ⊙ CAN compliant (option)
- ⊙ 3 x screen clamps for EMC termination

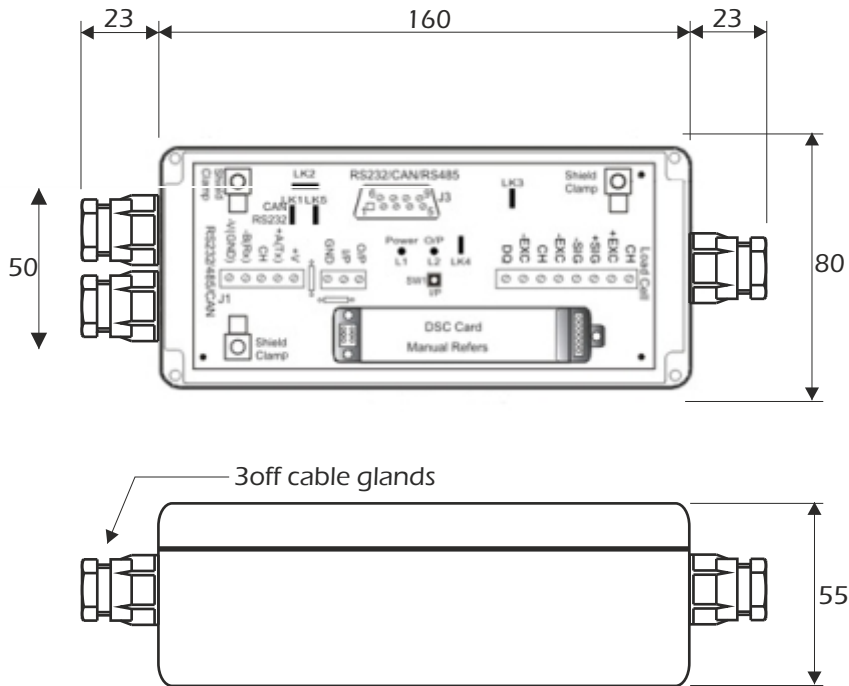
## Typical Applications

- ⊙ Vessel weighing
- ⊙ Cable tension measurement
- ⊙ Conveyor weighing
- ⊙ Force transfer standard interface

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## Dimensions



All dimensions are in mm



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Due to continual product development, LCM Systems Ltd reserves the right to alter product specifications without prior notice.

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