The DSM is a leading edge digital summing module that brings digital weighing technology to a wide range of weighing applications using tried-and-proven standard analog load cells. With this solution, you avoid being locked into other manufactures that offer proprietary digital load cell technology.

State-of-the-art technology incorporates four high-speed and independent channels for fast and easy calibration. This design replaces the use of traditional junction boxes and eliminates the time-consuming manual load cell trimming. In addition to analog calibration, the DSM provides digital calibration without the need to use test weights. This is accomplished though the available front-ends (DS200 control terminals).

Real-time diagnostics is performed automatically to detect and identify any failures with load cells. If a failure occurs, a visual message and an output signal are generated on the front-end to alarm the problem. The Interpolation function allows one loadcell to act for the other so the system can continue to operate to prevent costly down time.

When used with the optional Front-End control terminals the DSM offers a complete digital weighing technology solution at an affordable price.

The DSM is fully programmable in an easy and flexible macro language called Scale Basic™. In addition to the normal mode of operation, Scale Basic allows you to customize the operation of the DSM to meet your application requirements. The Scale Basic language provides various commands and functions that include: math operations, I/O control, setpoints, timers, data entry, ID storage, message display, and program sequence control among others. Programming the DSM can be performed through the front-end controller or a PC using the optional EZ-LINK™ software that greatly facilitates setup and programming.

**DIMENSIONS**

<table>
<thead>
<tr>
<th></th>
<th>A (8.5&quot;) (21.59 cm)</th>
<th>B (6.5&quot;) (16.51 cm)</th>
<th>C (4.5&quot;) (11.43 cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S200</td>
<td>8.5&quot; (21.59 cm)</td>
<td></td>
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<tr>
<td>Ez-Link</td>
<td></td>
<td>6.5&quot; (16.51 cm)</td>
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</tr>
<tr>
<td>Enclosure</td>
<td>Stainless steel Nema4/4X (IP68)</td>
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</tr>
</tbody>
</table>

**OPTIONS**

- **S200**: Front-End controller terminal
- **Ez-Link**: PC software for setup and Programming Windows 95/98/2000
- **Enclosure**: Stainless steel Nema4/4X (IP68)
- **Analog output module**: Fully isolated 0-10VDC or 4-20mA; 16-bit resolution; 650Ω load resistance
- **Lightning arrestors**: For load cell and DSM protection
- **Relay Box**: External 4 or 8 channel box
- **Relay Modules**: Input/output solid-state (AC/DC) relays
- **IS Barrier**: Hazard location intrinsic safety barriers
- **QD-Connector**: Quick disconnects
- **PC-FE**: PC front-end for indication
- **Multi-Scale**: Multi-scale input configuration

* (For future release)
**INDUSTRIAL DATA SYSTEMS**
**WEIGHING TECHNOLOGY LEADERS**

**APPLICATIONS**
- Batching, Bulk weighing and Process Control systems
- High capacity scales, silos, bins, tanks and hoppers
- Scale conversions to digital weighing technology
- Loss-in-Weight and Level monitoring
- Vehicle and railroad weighing
- Unattended weighing

**FEATURES**
- 4-Independent high-speed load cell channels for fast and easy calibration (Replaces the use of traditional junction boxes)
- Calibration adjustment for each load cell is done digitally instead of trim pots
- Expandable communication bus for multiple load cell applications
- Each channel can be turned into a separate and independent scale (optional)
- Real-time diagnostics for detecting and identifying load cell failures
- Intuitive diagnostics for testing and troubleshooting. Load cells can be enabled or disabled manually
- When used with the optional Front-Ends, the DSM offers a complete digital weighing technology solution using standard analog load cells
- Provides demand/continuous weight data transmission for use as a stand-alone module (block box). Analog output is also provided, as an option, for the same purpose
- Programmable in Scale Basic™ macro language for application development (event driven)
- Digital port for relay and remote operation
- 2 full duplex serial ports: RS232, RS485 and 20mA current loop
- Selectable baud rates (600 – 38.2K) and data formats

**OPTIONS**
- DS200 front-end controller terminal
- PC-DSM PC software: For setup and basic operation from a PC; Windows 95/98/2000 compatible
- Stainless steel Nema4/4X enclosure
- 4-20mA/0-10VDC isolated analog output with 16-bit resolution
- 4 to 8 channel external relay box
- Input/output solid-state relay modules (AC/DC)
- Lightning arrestors for load cell and DSM protection
- Intrinsick safety Barriers for hazardous locations Class I/II/III Div. 1 and 2 Groups A-G
- Sealed (IP68) connectors for quick disconnection
- PC front-end software for control and indication
- Multi-Scale input

**OPTIONAL FRONT-ENDS**

**STANDARD ANALOG LOAD CELLS**
With Digital Summing Technology