

WIRED TENSION LINK TO INDICATOR



Single or Multiple Tension Link System

Tension Link Specification and Features

- Standard Capacity: 10K, 25K, 50K, 75K, 100K, 150K, 250K lbs
- Safe overload: 200% capacity
- Ultimate overload: 400% capacity (meets ASME 26-6)
- Accuracy: 0.1% full scale multi-point calibration
 <= 0.5% full scale 2-pt calibration
- Protection: IP 67
- Operating Temperature: -40°C to 80°C
- Compensated Operating Temperature: -10°C to 40°C
- Alloy steel with Electroless Nickel Plating
- 40ft standard cable length hardwired to Indicator
- Option: Amphenol connector
- Option: Carrying Case

Indicators

- M1 Indicator
 - single Tension Link
 - 2-pt calibration (zero and span)
 - option: serial printer
- Max Indicator
 - single Tension Link
 - 2-pt calibration (zero and span)
 - option: serial printer
- M2000 Indicator
 - single (A-1) or multiple (A-3) up to 3 Tension Links
 - up to 5 multi-pt calibration (zero and 4 span)
 - option: serial printer
- Computer via DSCUSB
 - single Tension Link
 - 2-pt calibration (zero and span)
 - free DSCUSB Toolkit software
 - PC not included

M1 Specifications and Features

FEATURES

- Large LED Display & annunciators
- 5 button membrane keypad
- DYNArrest Vibration Filtering System for remarkably fast, stable readings in high vibration (industrial) areas
- 2 Serial ports
- Easy to navigate User & Calibration Menus
- Password and Category 1 Audit Trail system
- Programmable Weigh Tickets & Macros
- 4 or 6 wire load cell connections (jumper)
- Time & Date
- Mounting bracket



SPECIFICATIONS

POWER REQUIREMENTS

- 100-240 VAC 50/60 Hz
- Consumption: 40 mA (10 W)

EXCITATION

- 5 VDC. Up to 4 350 Ω or 8 700 Ω load cells

ANALOG INPUT RANGE

- 0-19 mV

RESOLUTION

- 1,000,000 internal A/D counts
- Up to 20,000 displayed divisions (LFT).
- Up to 100,000 (NLFT).

MEASUREMENT RATE

- 80 weight samples/second dependent on filter settings.

ANALOG SIGNAL SENSITIVITY

- .3 μ V

SYSTEM LINEARITY

- 0.01% of Full Scale

COMMUNICATIONS

- 1 full duplex RS-232 serial port
- 1 transmit only RS-232 serial port
- Fully configurable data format and selectable output strings.
- Wireless Communication Module (Optional)

RFI PROTECTION

- Filtered Excitation, Signal, and Sense lines

KEYPAD

- Membrane keypad: 5 keys

DISPLAY

- 7/8" (22 mm) LED display
- 6 digits (7 segments each)

ENCLOSURE

- 304 stainless steel with bracket
- Tough, dependable, and weather resistant

DIMENSIONS (Approx.)

- 9" x 5.5" x 3" (230mm x 140mm x 76mm) w/ bracket

WEIGHT (Approx.)

- 3.5 lb (1.6 kg)

OPERATING TEMPERATURE

- 14°F to 104°F (-10°C to 40°C)

APPROVALS

- NTEP Class III/IIIL (10,000): 09-012
- Measurement Canada Class III (10,000) / IIIHD (20,000): AM-5734

WARRANTY

- 2 year standard warranty

MAX Specifications and Features

FEATURES

- 3 Power Modes:
 - AC Power
 - 12 Volt battery terminal
 - 'D' Cell batteries
- PowerMax operating system stretches battery life
- LCD Display with backlight for easy outdoor and low-light readability
- DYNArrest Vibration Filtering System for remarkably fast, stable readings in dynamic weighing applications
- Flashlight style battery compartments
- 5 button keypad with User and Calibration menus
- Password and Category 1 Audit Trail system
- 1 Fully configurable serial port
- Programmable Weigh Tickets & Macros
- 4 or 6 wire load cell connections (jumper)
- Time & Date
- Shrinkage, Averaging, & Peak Hold functions



SPECIFICATIONS

POWER REQUIREMENTS

- AC: 100-240 V 50/60 Hz
- DC: 12 VDC battery terminal
- Battery: 4 'D' cell alkaline batteries
- Max: 25 mA (6 W)

EXCITATION

- 5 VDC. Up to 4 350 Ω or 8 700 Ω load cells

ANALOG INPUT RANGE

- 0 - 19 mV

RESOLUTION

- 1 million internal A/D counts
- Up to 20,000 (LFT) displayed divisions. Up to 100,000 NLFT.

MEASUREMENT RATE

- 10-80 weight samples/second dependent on filter settings.

ANALOG SIGNAL SENSITIVITY

- .3 μ V

SYSTEM LINEARITY

- 0.01% of Full Scale

COMMUNICATIONS

- 1 fully configurable, full duplex RS-232 serial port.
- Fully configurable data format and selectable output strings.
- Wireless Communication Module (Optional)

RFI PROTECTION

- Filtered Excitation, Signal, and Sense lines

KEYPAD

- Membrane keypad: 5 keys

DISPLAY

- 1" (25 mm) LCD display
- Adjustable LED backlight
- 6 digits (7 segments each)

ENCLOSURE

- 304 stainless steel with bracket
- Tough, dependable, and weather-proof

DIMENSIONS

- 9.5" x 7" x 4" (240mm x 178mm x 102mm) w/ bracket, etc.

WEIGHT

- 5 lb (2.3 kg)

OPERATING TEMPERATURE

- 14°F to 104°F (-10°C to 40°C)

APPROVALS

- NTEP Class III/IIIL (10,000): 08-004
- Measurement Canada Class III (10,000) / IIHD (20,000): AM-5665

WARRANTY

- 2 year standard warranty

M2000A-1 Specifications and Features

FEATURES

- 1 Scale channel
- 1 Fully configurable serial port
- FASTSTEP Filtering for remarkably fast, stable readings
- Extremely resistant to interference (static, EMI, RFI)
- Accommodates load cell SENSE lines
- Full keypad calibration to any test weight amount
- 4 Linearity points
- Password and Category 1 Audit Trail system
- Custom Weigh Ticket Editor
- Interactive Ticket Macros for Accumulation, Truck In/Out, Axle weighing, and more...
- Store up to 100 truck IDs and tare weights
- Over 20 selectable output strings
- Serial Command mode
- Time & Date
- 6 Remote Inputs (optional)
- 6 Setpoints (optional)
- 4-20 mA Output (optional)



* SL Enclosure

SPECIFICATIONS

POWER REQUIREMENTS

- Input: 12 VDC 1 A. 120 VAC adapter included for most models.
- External AC adapter available for SL models.
- Consumption: 200 mA

EXCITATION

- 7.5 VDC. Up to 16 350 ohm or 32 700 ohm load cells

ANALOG INPUT RANGE

- Selectable: 0-9 mV; 0-19 mV; 0-39 mV; 0-79 mV

RESOLUTION

- 1,000,000 internal A/D counts
- Up to 100,000 displayed divisions

MEASUREMENT RATE

- 100 weight samples/second

ANALOG SIGNAL SENSITIVITY

- .3 μ V

COMMUNICATIONS

- 1 fully configurable, full duplex serial port.
- Supports RS-232, RS-422, and optional RS-485 Multi-drop.
- Wireless Communication Module (Optional)

RFI PROTECTION

- Filtered Excitation, Signal, and Sense lines

SYSTEM LINEARITY

- 0.01% of Full Scale

KEYPAD

- Membrane keypad: 16 numeric & function keys.

DISPLAY

- 3/4" (19 mm) LED display.
- 6 digit (7 segments each)

OPERATING TEMPERATURE

- 14°F to 104°F (-10°C to 40°C)

APPROVALS

- NTEP Class III/IIIL (10,000): 00-076A1
- Measurement Canada Class III (10,000) / IIHHD (20,000): AM 5371

WARRANTY

- 2 year standard warranty

M2000A-3 Specifications and Features

FEATURES

- 3 Scale channels
- 2 Fully configurable serial ports
- FASTSTEP Filtering for remarkably fast, stable readings
- Extremely resistant to interference (static, EMI, RFI)
- Accommodates load cell SENSE lines
- Full keypad calibration to any test weight amount
- 4 Linearity points
- Password and Category 1 Audit Trail system
- Custom Weigh Ticket Editor
- Interactive Ticket Macros for Accumulation, Truck In/Out, Axle weighing, and more...
- Store up to 100 truck IDs and tare weights
- Over 20 selectable output strings
- Serial Command mode
- Time & Date
- 6 Remote Inputs (optional)
- 6 Setpoints (optional)
- 4-20 mA Output (optional)



* LSB Enclosure

SPECIFICATIONS

POWER REQUIREMENTS

- Input: 12 VDC 1 A. 120 VAC adapter included for most models.
- External AC adapter available for SL models.
- Consumption: 200 mA

EXCITATION

- 7.5 VDC. Up to 16 350 ohm or 32 700 ohm load cells

ANALOG INPUT RANGE

- Selectable: 0-9 mV; 0-19 mV; 0-39 mV; 0-79 mV

RESOLUTION

- 1,000,000 internal A/D counts
- Up to 100,000 displayed divisions

MEASUREMENT RATE

- 100 weight samples/second

ANALOG SIGNAL SENSITIVITY

- .3 μ V

COMMUNICATIONS

- 2 fully configurable, full duplex serial ports.
- Supports RS-232, RS-422, and optional RS-485 Multi-drop.
- Wireless Communication Module (Optional)

RFI PROTECTION

- Filtered Excitation, Signal, and Sense lines

SYSTEM LINEARITY

- 0.01% of Full Scale

KEYPAD

- Membrane keypad: 16 numeric & function keys.

DISPLAY

- 3/4" (19 mm) LED display.
- 6 digit (7 segments each)

OPERATING TEMPERATURE

- 14°F to 104°F (-10°C to 40°C)

APPROVALS

- NTEP Class III/IIIL (10,000): 00-076A1
- Measurement Canada Class III (10,000) / IIHHD (20,000): AM 5371

WARRANTY

- 2 year standard warranty

M2000 Enclosure type

SLIMLINE (SL)

- Sleek, compact design
- 12 ga. aluminum enclosure
- Powder coated finish
- External power supply (AC adapter)
- Also suitable for panel mounting
- 9" W x 4" H x 1 3/4" D
- With bracket 10 1/2" W x 4 1/2" H x 2" D



Ship Weight: 2.7 lb (1.2 kg)

DESKTOP (DT)

- Best for desk or table top viewing
- Lightweight Stainless Steel enclosure
- No-skid foot pads
- Built-in power supply
- Room for 1 option board (4-20 mA or Remote Input)
- 9 3/4" W x 6" H x 3 1/4" D



Ship Weight: 5 lb (2.3 kg)

LIGHTWEIGHT SWIVEL BRACKET (LSB)

- Durable, easy to read, all purpose enclosure
- Lightweight Stainless Steel
- Stainless Steel Mounting bracket
- Built-in power supply
- Room for 1 option board (4-20 mA, Remote Input, or Setpoint w/ 2 relays)
- 7 1/4" W x 10" H x 2 3/4" D



Ship Weight: 7 lb (3.1 kg)

STAINLESS STEEL WASHDOWN (NSS)

- Suitable for damp environments
- Stainless Steel enclosure with wall-mount tabs
- Sealed faceplate
- Built-in power supply
- Room for 2 option boards (4-20 mA, Remote Input, or Setpoint w/ 6 relays)
- 8" W x 11 1/2" H x 4 1/2" D



Ship Weight: 8 lb (3.6 kg)

HEAVY DUTY (NSS-1)

- Suitable for tough, wet environments
- Heavy Duty Stainless Steel enclosure
- 6 Adjustable, Stainless Steel latches
- Sealed faceplate
- Built-in power supply
- Room for 2 option boards (4-20 mA, Remote Input, or Setpoint w/ 6 relays)
- 8" W x 11 1/2" H x 4 1/2" D



Ship Weight: 8 lb (3.6 kg)

DSCUSB Specification and Features

Specifications

Parameter

Strain Gauge Measurement	4 Wire
Strain Gauge Excitation Voltage	5 V dc
Strain Gauge Drive Capability	85 Ohms
Strain Gauge Sensitivity	3 mV/V
Offset Temperature Stability	4 ppm / °C
Gain Temperature Stability	5 ppm / °C
Non Linearity before Linearization	25 ppm of FR
Internal Resolution	16 Million Counts/divs
Resolution @ 1Hz readings (Noise stable) over 100s	200,000 Counts/divs
Resolution @ 10Hz readings (Noise stable) over 100s	120,000 Counts/divs
Resolution @ 100Hz readings (Noise stable) over 100s	50,000 Counts/divs

Electrical

Power Supply Voltage (USB)	5 V dc
Power Supply Current (350 Ohm Bridge)	68 mA

Data Transmission

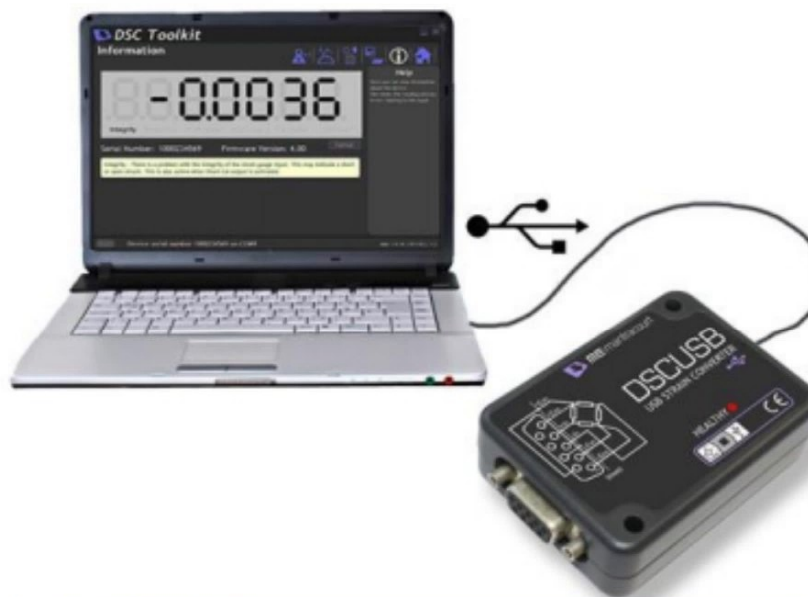
Maximum Output Cable Length	5 m
Data Transmission Rate	115.200 kbps

Environmental

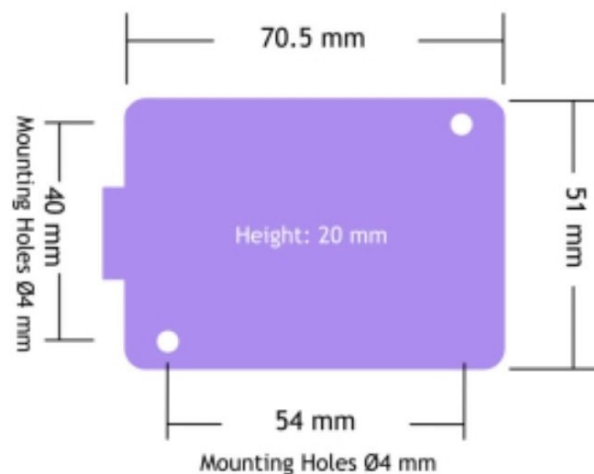
Operating temperature range	-40 to +85 °C
Storage temperature range	-40 to +85 °C
Maximum Humidity	95% RH
Protection	IP50

Dimensions

Cased Version	70.5 x 51 x 20mm excluding 9-way 'D' type socket connector. 74.5 x 51 x 20mm including connector.
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Mechanical



Electrical



DSCUSB TOOLKIT FEATURES

EASY TO USE,
INTUITIVE TOOLKIT
SOFTWARE FOR
SPEEDY AND
PAINLESS SET-UP

- Connect in seconds
- Intuitive interface
- Configures, calibrates and provides logging functionality



What does it do?

This toolkit allows configuration, calibration, logging and parameter management of the [DSCUSB](#) and [DSCUSB-PT](#) modules.

You can explore the software without a device connected.

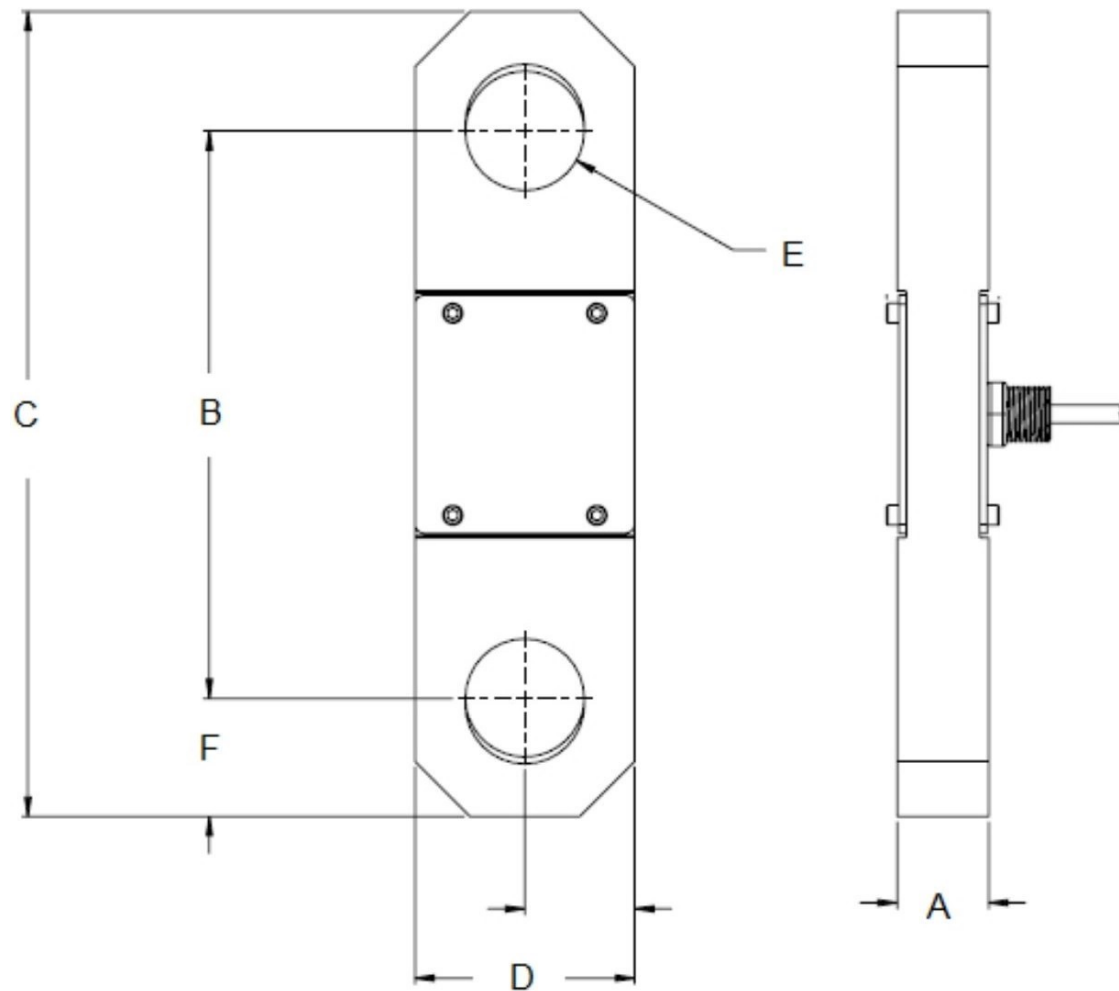
Features & benefits:

- Viewing of input with annunciators for integrity and range errors.
- Two point auto calibration by application of known weight.
- Two point certificate calibration from manufacturer loadcell certificate.
- Trend chart.
- Setting System Zero and under and over range limits.
- Select measurement rate and filter settings.
- Save device settings including user calibration and ability to restore to same or different USB DSC modules.
- Log input value to a CSV file at up to 100Hz which can be analysed in Microsoft Excel.
- OEM level temperature compensation and linearisation calibration.
- Ability to lock OEM settings from tampering.

Minimum hardware specification:

- Compatible with Windows XP, Vista, Win 7, Win 8 and Win 10 (including 64bit)
- 1GHz processor
- 512MB RAM
- Mouse or other pointing device
- USB port

Tension Link Dimension



All Tension Links						
Capacity	A	B	C	D	E	F
10K	1.250 (31.75)	7.500 (190.50)	10.000 (254.00)	3.000 (76.20)	1.125 (28.58)	1.250 (31.75)
25K	1.250 (31.75)	7.750 (196.85)	11.000 (279.40)	3.000 (76.20)	1.625 (41.28)	1.625 (41.28)
50K	1.625 (41.28)	8.500 (215.90)	12.750 (323.85)	3.625 (92.08)	2.125 (53.98)	2.125 (53.98)
75K	1.875 (47.63)	9.375 (238.13)	14.250 (361.95)	4.500 (114.30)	2.375 (60.33)	2.438 (61.93)
100K	1.940 (49.28)	9.375 (238.13)	14.750 (374.65)	5.000 (127.00)	2.375 (60.33)	2.688 (68.28)
150K	2.438 (61.93)	11.000 (279.40)	17.500 (444.50)	6.750 (171.45)	2.875 (73.03)	3.250 (82.55)
200K	2.940 (74.68)	11.000 (279.40)	19.500 (495.30)	7.440 (188.98)	3.375 (85.73)	4.25 (107.95)
250K	2.940 (74.68)	14.000 (355.60)	22.750 (577.85)	8.500 (215.90)	3.875 (98.43)	4.375 (111.13)

Calibrated to Matching Crosby Shackle Pin Diameter

- 10K : 0.89" G-2130-4.75T
- 25K : 1.40" G-2130-12T
- 50K : 2.04" G-2130-25T
- 75K : 2.30" G-2130-35T
- 100K : 2.25" G-2140-55T
- 150K : 2.76" G-2140-85T
- 250K : 3.76" G-2130-120T



Pin diameter

APPLICATIONS

- **MINING**



- **MANUFACTURING**
- **FABRICATION**



- **AUTOMOTIVE**



- **MARINE**



- **CONSTRUCTION**

