

EDXtreme Dynamometer/Load Link

CE



Guesswork is not acceptable – failure is not an option. When you have people working around high tension cables and massive loads, there is no room for error. Complete confidence in the strength and the accuracy of your measurement tools is a must.

Since 1937, Dillon Dynamometers have been chosen for the jobs where only the best will do. Now, Dillon has once again lifted the performance bar and set the standard for others to follow.

Uncompromising and adaptable

The EDXtreme exemplifies the trademark precision and rugged construction of Dillon dynamometers. Its highly refined design draws on the inherent strengths of premium-grade materials to achieve a 5:1 minimum factor of safety.*

While the EDXtreme may be configured for something as simple as a digital hanging scale, it offers a higher level of intelligence. With user-defined functions and sophisticated communication options, the EDXtreme readily adapts to multi-tasking operations or multi-link systems capable of monitoring a series of critical stress points from a single location – it is the definition of application versatility.

Xtreme engineering

Building a precision instrument that can survive real-world punishment requires precise engineering. This is where Dillon's experience shines through. Our engineers have drawn upon their collective mechanical, electrical and component experience to achieve the highest structural integrity.

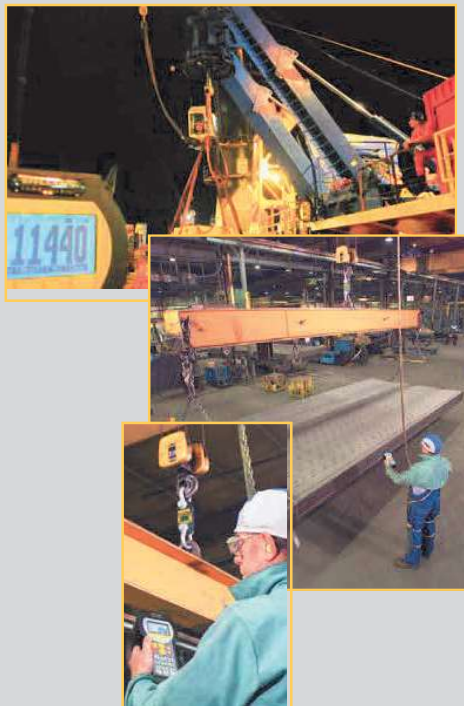
- **Capacity** – 250 lbf to 550,00 lbf / 1000 kgf to 250,000 kgf
- **7:1 factor of safety*** – This measure of strength and safety is maintained by most capacities. Computer modeling confirms the low stress and long product life that is inherent in the EDXtreme design.
* Models 5T and below feature a 7:1 safety factor. Models 10T- to 50T feature a 5:1 safety factor. Models 75T or higher feature a 4:1 safety factor.
- **Superior strength and corrosion resistance** – High capacity models are constructed of powder coated aircraft-quality alloy steel. Lower capacity models are powder coated aircraft-quality aluminum.
- **Retained hardware** – Allows permanent attachment of centering spacers, which eliminates fumbling during high capacity rigging
- **NEMA 4X/IP55** – The EDXtreme is clearly the choice for reliability in any environment – in-plant or out on the job site
- **On board storage** (Accumulation lift and store, push button, and continuous)
- **Load alarm** – LED light

Xtreme accuracy

High resolution and accurate repeatable readings are essential to proper weighing. The higher standards set for the EDXtreme meant taking the time to ensure that material characteristics, load element design and strain gauge mesh perfectly. The result is a typical accuracy of 0.1% of full scale capacity*. The enhanced resolution mode of 1 part in 5000 provides the level of readability needed for refined weighing.

Xtreme ease

- **Exclusive SOFTKEY interface** – Dillon has eliminated confusing menus for faster setup and simple operation. In addition to lbf, kgf and Newtons, programmable functions can correct for gravitational variations and allow the use of custom units of measurement along with multiple lines or reeving.
- **Wide-angle, backlit LCD** – Provides improved readability over a wider viewing angle and has backlighting for low light conditions.
- **Battery operation** – The EDXtreme is powered by two standard C-cell batteries. Batteries are easily accessible for fast replacement.



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The EDXtreme can be upgraded for wireless use, enabling the dynamometer to connect to a handheld Communicator II which allows remote configuration, data acquisition and single point monitoring of multiple dynamometers.

An RS-232 interface is standard on both the EDXtreme and Communicator II for connection to a host PC where Dillon data manager real time logging software can reside.

Typical Configurations

1. Standalone EDX for direct measurement applications.
2. Single network with one EDX radio dynamometer and Communicator.
3. Single network with multiple EDX dynamometers and one Communicator. The communicator monitors the load at each scale, plus the total weight..
4. Single network with two, three or four Communicators.
5. Multiple networks with multiple EDX dynamometers and Communicators.

Communications unlock the full potential of the EDXtreme

The potential for additional functions is one of the a key reason for choosing an electronic dynamometer. Both the radio and hardwired options available within the EDXtreme range offer the convenience and safety of remote operation. Additionally, stored data can be downloaded to a PC via an RS-232 connection for compilation and analysis or to generate hard-copy printouts.

Improved radio performance

The EDXtreme radio dynamometer uses leading-edge 2.4Ghz radio frequency technology to eliminate common interference issues. This spread spectrum technology will establish and maintain the strongest, most reliable communications within seconds and is plug and play.

Dynamic monitoring and control

The optional Communicator II is an extremely powerful handheld remote that can define the function and manage the operation of one or more EDXtreme dynamometers using wired or radio technologies. Using the programmable SOFTKEY interface, one or more Communicator II devices can monitor multiple dynamometers within the same airspace. Using multiple-link lifting arrays, the Communicator II can display readings at any or all lift points and calculate the total load.

Options

Printer, remote display



CP103



RD-65



ABS plastic carry case



Bracket



Rubber Sleeve



Optional Remote Communicator II

EDXtreme Dynamometer/Load Link

Capacity and Resolution

Model*	Capacity x Resolution (normal/enhanced)			Overload†	Construction
EDX-1T (EDX-2.5K)	2,500 lbf x 2/0.5	1,000 kgf x 1/0.2	10,000 N x 10/2	700%	Aircraft-quality 2024 aluminum
EDX-2T (EDX-5K)	5,000 lbf x 5/1	2,000 kgf x 2/0.5	20,000 N x 20/5		
EDX-5T (EDX-10K)	10,000 lbf x 10/2	5,000 kgf x 5/1	50,000 N x 50/10		
EDX-10T (EDX-25K)	25,000 lbf x 20/5	10,000 kgf x 10/2	100,000 N x 100/20	500%	Aircraft-quality E4340 alloy steel
EDX-25T (EDX-55K)	55,000 lbf x 50/10	25,000 kgf x 20/5	250,000 N x 200/50		
EDX-50T (EDX-100K)	100,000 lbf x 100/20	50,000 kgf x 50/10	500,000 N x 500/100		
EDX-75T (EDX-160K)	160,000 lbf x 100/50	75,000 kgf x 50/20	—	400%	Aircraft-quality E4340 alloy steel
EDX-100T (EDX-220K)	220,000 lbf x 200/50	100,000 kgf x 100/20	—		
EDX-150T (EDX-330K)	330,000 lbf x 200/100	150,000 kgf x 100/50	—		
EDX-250T (EDX-550K)	550,000 lbf x 500/200	250,000 kgf x 200/50	—		

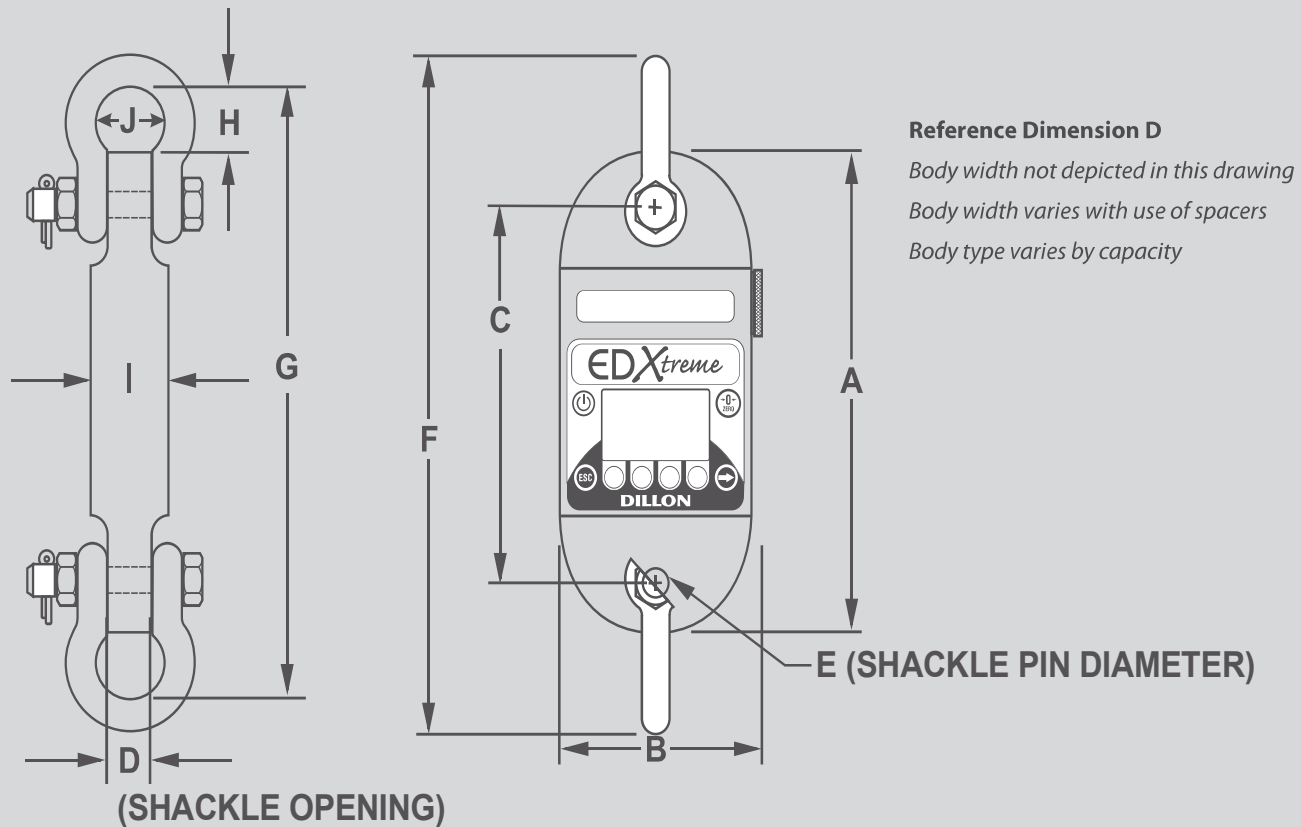
* Model number in parenthesis shows U.S. convention for describing capacities. † Ultimate overload protection rating.

Dimensions inches (mm)

Model	A	B	C	D	E	F	G	H	I	J	Shackle
EDX-1T	10.6 (269)	5.0 (127)	7.8 (198)	1.06 (26)	0.75 (19)	15.3 (389)	13.4 (340)	1.36 (34)	1.65 (41)	1.69 (43)	Dillon
EDX-2T	10.6 (269)	5.0 (127)	7.8 (198)	1.06 (26)	0.75 (19)	15.3 (389)	13.4 (340)	1.36 (34)	1.65 (41)	1.69 (43)	Dillon
EDX-5T	11.4 (289)	5.3 (135)	8.1 (206)	1.38 (35)	1.00 (25)	17.5 (400)	15.7 (400)	2.17 (56)	1.80 (45)	2.28 (58)	Green Pin*
EDX-10T	11.5 (291)	5.3 (133)	7.9 (201)	1.97 (50)	1.38 (35)	21.0 (534)	18.5 (470)	3.50 (89)	1.75 (44)	3.25 (83)	Green Pin*
EDX-25T	13.7 (348)	6.0 (152)	9.0 (229)	2.75 (70)	1.97 (50)	28.7 (730)	25.2 (640)	5.70 (146)	1.87 (47)	4.96 (126)	Green Pin*
EDX-50T	15.8 (400)	6.8 (172)	10.3 (262)	3.88 (99)	2.75 (70)	38.8 (986)	33.7 (856)	8.98 (228)	2.12 (53)	7.09 (180)	Green Pin*
EDX-75T	16.5 (419)	7.8 (197)	10.3 (262)	3.88 (99)	2.75 (70)	39.3 (998)	33.7 (856)	8.58 (218)	2.36 (59)	7.09 (180)	Green Pin*
EDX-100T	18.0 (457)	7.8 (197)	11.0 (280)	5.00 (127)	3.25 (83)	46.9 (1911)	40.4 (1025)	11.14 (283)	2.84 (72)	7.48 (190)	Green Pin*
EDX-150T	21.0 (533)	8.8 (222)	12.6 (321)	5.25 (133)	3.75 (95)	53.9 (1368)	45.6 (1159)	12.3 (313)	3.32 (84)	9.0 (229)	Crosby
EDX-250T	27.0 (686)	9.8 (248)	17.5 (445)	8.5 (216)	5.00 (127)	75.8 (1925)	62.8 (1595)	17.9 (454)	4.50 (114)	13.0 (330)	Crosby

*Dimensions shown using Green Pin shackles. Crosby shackles available - consult factory for dimensions.

Dimensions shown are nominal and subject to tolerances.



EDXtreme Dynamometer/Load Link

Dynamometer Specifications

Enclosure: Designed to NEMA4X/IP55. Suitable for continuous outdoor use.

Accuracy: 0.1% of capacity up to EDX-50T.*
0.3% of capacity for EDX-75T and above.*

Repeatability: 0.1% of capacity up to EDX-50T.*
0.3% of capacity for EDX-75T and above.*
* Normal resolution mode with Dillon provided shackles.

Proof Load: 150% of capacity up to EDX-75T
110% of capacity EDX-100T and above.

Ultimate Overload: See table on reverse.

Safe Overload: 200% of capacity

Body Protection: Aluminum and alloy steel capacities are powder coated

Bearings: Unmatched repeatability attained by needle bearings in shackle pin holes up to EDX-5T. Shackle pin acts as inner race.

Shackles: Forged industry standard anchor shackles. Models up to EDX-5T use precision machined shackle pin. Higher capacities use bar stock pin.

Display: 128 x 64 dot-graphic LCD display shows up to six digits 1.0" (26 mm) high plus annunciators and softkeys. Digits are 0.11" (3 mm) thick for unmatched readability

Display Update Rate: Two times per second

Peak Capture Rate: 10/100/1,000 Hz

Connector: Recessed sealed connector may be used for serial communications or connection to a Communicator II remote

RS-232 Communication: Print or extract data easily. Continuous output can drive a scoreboard. Configurable poll character.

Calibration: Traceable to the National Institute of Standards and Technology. Certificate included with curve of readings. Passes only with three consecutive confirming runs, with all points in specification.

Battery Life: Standalone EDXtreme with no radio and no backlight lasts up to 400+ hours continuous. 150 hours continuous with Radio Link System. Use with two C-Cell alkaline batteries. When using backlight, battery life will be reduced, depending on intensity.

Operating Temperature: -4° F to 158° F (-20° to 70° C)

Included with Instrument: All include certificate of calibration, manual and batteries. Plastic carry case included for EDX-1T to EDX-50T. Higher capacities include rugged plywood storage crate. Instruments with shackles include centering spacers (EDX-20T and up) and shackle storage crate (EDX-20T to EDX-75T). Display backlight.

Options: Shackles and radio communications

Approval: CE on all capacities excluding 550K

Communicator II Specifications

Enclosure: Designed to NEMA 3 / IP54 with optional sleeve.
Suitable for protected outdoor use.

Instrument Size: 9.5 x 5.0 x 2.5" (241 x 127 x 64 mm)

Accuracy: Not applicable. Only sends and receives digital information.

Display: 128 x 64 dot-graphic LCD display can show full readings up to five instruments

Battery Life: Up to 80 hours continuous radio using four AA alkaline batteries

Operating Temperature: -4° F to 158° F (-20° to 70° C)

Connectors: Sealed connectors may be used for serial communications and wired connection to an EDXtreme Dynamometer.

RS-232 Communication: Print or extract data easily. Continuous output can drive a scoreboard. Configurable poll character.

Included with Remote: Carry case and batteries

Accessories: Rubberized case protector sleeve.
Remote wall mount bracket. Serial and remote cable assemblies.

Approval: CE

Radio Specifications

FCC Certified: For unlicensed low power devices. No radio licensing or permits required for normal operation.* (In the US and Canada. Check local ordinances in other countries.)

Frequency: ISM 2.4 GHz frequency band operates between 2.4 to 2.4835 GHz

Output Level: 10 mW (10 dBm)

Display Update Rate: One time per second

Number of Links Remote Can Control: Up to 250 addresses

Configuration Address: Automatic and configurable

Antenna: Integral antenna

Range: Open-air range up to 600 feet (200 m), line-of-sight. Indoor range dependent upon environment with 300 feet (100 m) common. Low power radio systems are dependent upon interference levels from other radio systems and environmental conditions. Radio devices are not suitable for all applications.

Weights

Model	Unit Weight lb (kg)	Weight with Shackles lb (kg)	Unit Ship Weight lb (kg)	Unit/Shackle Ship Dimension in (mm)
Communicator	1.25 (.6)	—	5 (2)	13 x 9 x 19 (330 x 229 x 483)
EDX-1T	4.3 (2.0)	8.6 (3.9)	18 (8)	16 x 7 x 19 (406 x 178 x 483)
EDX-2T	4.4 (2.0)	8.7 (3.9)	18 (8)	16 x 7 x 19 (406 x 178 x 483)
EDX-5T	5.6 (2.5)	14 (6)	23 (10)	16 x 7 x 19 (406 x 178 x 483)
EDX-10T	16 (7.3)	38 (17)	53 (24)	21 x 11 x 23 (553 x 279 x 584)
Model	Unit Weight lb (kg)	Shackle Weight lb (kg)	Unit Ship Weight/Dimension lb (kg) / in (mm)	Shackle Ship Weight/Dimension lb (kg) / in (mm)
EDX-25T	25 (11)	91 (41)	37 (17)	85 (39)
			16 x 7 x 19 (406 x 178 x 483)	15 x 8 x 26 (381 x 203 x 660)
EDX-50T	38 (17)	216 (98)	52 (24)	250 (113)
			16 x 7 x 19 (406 x 178 x 483)	17 x 9 x 23 (432 x 229 x 483)
EDX-75T	54 (25)	229 (104)	82 (37)	250 (113)
			12 x 10 x 32 (305 x 254 x 813)	17 x 9 x 23 (432 x 229 x 483)
EDX-100T**	70 (32)	395 (179)	480 (218)	
EDX-150T**	120 (54)	650 (295)	750 (340)	
EDX-250T**	250 (113)	1,490 (675)	1600 (726)	

**Ships on pallet