

**Nextech DFS-N**

# Nextech DFS1000 Digital Force Gauge User Manual

Model: DFS-N

Brand: Nextech

## INTRODUCTION

This manual provides detailed instructions for the safe and effective operation of your Nextech DFS1000 Digital Force Gauge. Please read this manual thoroughly before using the device to ensure proper functionality and to prevent damage.

## KEY FEATURES

- Accuracy 0.2% or better of Full Scale (FS).
- Hold Peak Tension or Compression load reading until reset.
- Peak or Track Mode for versatile measurements.
- Internal memory for storing up to 500 readings.
- Compatible with 'NexGraph' PC Software for plotting Time vs Force.
- M6 Threaded Rod attachment for various load accessories.
- Menu-driven, digital graphic LCD display with white backlight.
- Durable metal enclosures with 2x 10-32"(M5) & 4x M3 mountable threaded holes.
- Re-calibration feature with password protection.
- Load cell condition and overload counter's display page for diagnostics.
- Powered by internal rechargeable NiMH battery pack or directly from wall plug charger.
- Includes plastic case, charger, USB cable, printed manual, and 3 stainless steel accessories.
- Factory's calibration certificate included.

## SETUP

### Unpacking and Initial Inspection

Carefully unpack all components from the carrying case. Verify that all items listed in the 'Included Components' section are present and undamaged. If any items are missing or damaged, contact Nextech customer support immediately.

## Charging the Device

The DFS1000 is powered by an internal rechargeable NiMH battery pack. Before first use, fully charge the device using the provided 100-240 volts US Plug charger. Connect the charger to the device's power input port and plug it into a suitable power outlet.



Image: The DFS1000 Digital Force Gauge, charger, USB cable, and three stainless steel accessories (sharp point, hook, and compression plate) neatly arranged within its black plastic carrying case, alongside the printed manual.

## Attaching Accessories

The device features an M6 threaded rod attachment point for connecting various load accessories. Select the appropriate stainless steel accessory (sharp point, hook, or compression plate) for your testing application and securely screw it onto the threaded rod.



Image: A front view of the Nextech DFS1000 Digital Force Gauge, showing its digital display and control buttons. A hook attachment is screwed into the bottom of the device, ready for tension testing.

## OPERATING INSTRUCTIONS

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### Powering On/Off

Press the red power button to turn the device on or off. The digital graphic LCD display will illuminate.



Image: A close-up, angled view of the Nextech DFS1000 Digital Force Gauge, highlighting its large back-lit graphic LCD screen and the arrangement of its control buttons, including the red power button.

## Selecting Measurement Modes

The DFS1000 offers three primary measurement modes: Peak Tension, Peak Compression, and Tracking. Use the 'MODE' button to cycle through these options. The selected mode will be indicated on the LCD display. This feature is demonstrated in the video below.

## Changing Units of Measurement

The device supports multiple units of measurement, including kilogram-force (kgf), pound-force (lbf), newton (N), and kilonewtons (kN). Press the 'UNIT' button to switch between these units. The current unit will be displayed on the screen. This feature is demonstrated in the video below.

## Zeroing the Display

Before taking a measurement, ensure the display reads zero. Press the 'ZERO' button to reset the reading. This is crucial for accurate measurements.

## Pass/Fail Limits

The DFS1000 allows you to set upper and lower pass/fail limits. If a measurement falls outside these predefined limits, the device will indicate a 'Fail' status using LED indicators. Refer to the device's menu for setting these limits. This feature is demonstrated in the video below.

## Memory Storage and Data Logging

The device can store up to 500 readings in its internal memory. To save a reading, press the 'ENTER MEM' button. You can review stored results directly from the menu or download them to a Windows-based computer using the provided USB cable and 'NexGraph' PC software. This feature is demonstrated in the video below.



Image: A rear view of the Nextech DFS1000 Digital Force Gauge, showing the various ports at the top, including the USB output for data transfer to a computer.

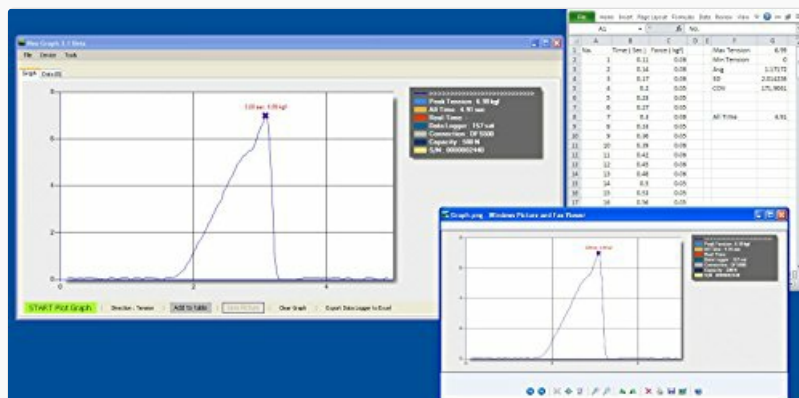


Image: A screenshot of the 'NexGraph' PC software interface, displaying a force versus time plot and a table of recorded data, demonstrating the data logging and analysis capabilities of the DFS1000.

## Official Product Video: Features Overview

Your browser does not support the video tag.

Video: This official video from Nextech provides an overview of the DFS Digital Force Gauge's key features, including how to select measurement modes (Peak Tension, Peak Compression, Tracking), change units of measurement (kgf, lbf, N, kN), set and interpret pass/fail limits, store and review memory data, and view diagnostic details like the overload counter.

## MAINTENANCE

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### Cleaning

Wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents. Ensure no liquids enter the device.

### Storage

Store the DFS1000 in its provided plastic case in a cool, dry place when not in use. Avoid extreme temperatures and humidity.

### Recalibration

The device features a recalibration function with password protection. Regular calibration is recommended to maintain accuracy. Refer to the device's menu for calibration procedures or contact Nextech support for professional calibration services.

## TROUBLESHOOTING

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### Device Not Powering On

- Ensure the battery is charged. Connect the charger and allow it to charge for at least 30 minutes before attempting to power on again.
- Verify the power button is pressed firmly.

### Inaccurate Readings

- Ensure the device is zeroed before each measurement.
- Check that the correct unit of measurement is selected.
- Consider recalibrating the device if inaccuracies persist.

### Data Transfer Issues

- Verify the USB cable is securely connected to both the device and the computer.
- Ensure the 'NexGraph' PC software is correctly installed and running on your computer.
- Check the device's 'Select Output' menu option to ensure USB output is enabled.

### Overload Counter

The device includes an overload counter display page in the diagnostic menu. This can help identify if the device has been subjected to forces exceeding its capacity, which might affect its performance. Access this via the menu. This feature is demonstrated in the official product video.

## SPECIFICATIONS

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Feature	Detail
Brand	Nextech

Model Number	DFS-N
Product Dimensions (L x W x H)	2.95 x 1.18 x 6.3 inches
Item Weight	1.18 Kilograms (2.6 Pounds)
Material	Aluminum
Batteries	4 AAA batteries (included)
Country of Origin	Thailand
Manufacturer	Nextech Global Company Limited.
Accuracy	0.2% or better of FS (Full Capacity)
Memory Storage	500 readings
Display Type	Back-Lit Graphic LCD
Power Adapter Input	100-240 volts AC

Capacity Information (DFS Series)



Image: A table showing the different models in the DFS series (DFS 50, DFS 100, DFS 200, DFS 500, DFS 1000) and their corresponding capacities in Pound (lbf), Kilogram (kgf), and Newton (N).

Physical Dimensions

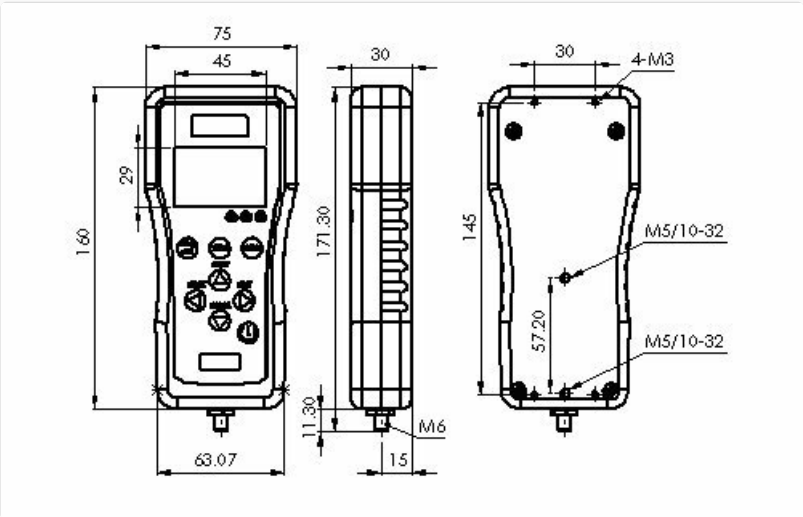


Image: A technical drawing illustrating the dimensions of the Nextech DFS Digital Force Gauge from front, side, and rear



perspectives, including measurements in millimeters and details on threaded mounting holes (M3, M5, M6).

## WARRANTY AND SUPPORT

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The DFS1000 comes with a factory calibration certificate. For warranty information, technical support, or service inquiries, please contact Nextech Global Co., Ltd. directly. Contact details can typically be found on the manufacturer's website or in the included printed manual.

For additional support and resources, visit the official [Nextech Store on Amazon](#).

## INCLUDED COMPONENTS

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The complete set includes:

- DFS1000 Digital Force Gauge
- Plastic Carrying Case
- 100-240 volts US Plug Charger
- USB Cable
- Printed Manual
- 3x Stainless Steel Accessories:
  - Sharp Point
  - Hook
  - Compression Plate
- Factory's Calibration Certificate

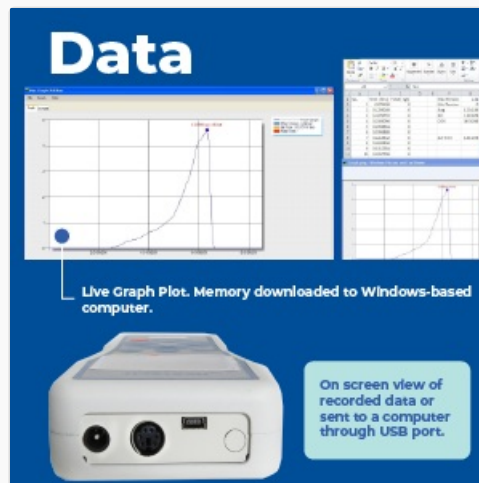


Image: A diagram illustrating the components included in the DFS series force gauge kit, such as the plastic case, manual, USB cable, charger, the force gauge itself, and three stainless steel accessories (sharp point, hook, and compression plate).

## OPTIONAL ACCESSORIES

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Additional handles and accessories are available and sold separately to expand the functionality of your DFS1000 Digital Force Gauge.



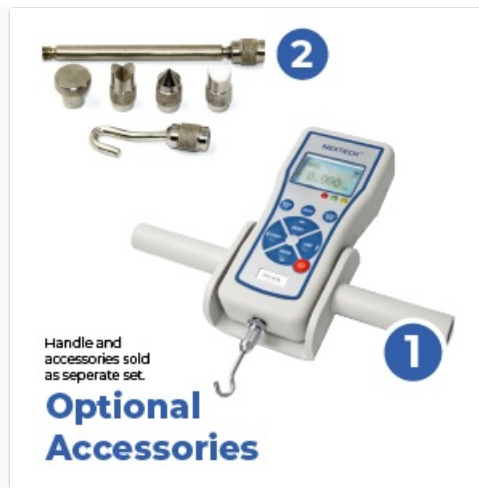


Image: A display of optional accessories for the DFS series force gauge, featuring a handle assembly and various additional attachments for specialized testing applications.