

# Turf-Tec International

## Turf-Tec Grass Height Prism Gauge with Laser Metric Model



The new Turf-Tec Grass Height Prism Gauge with Laser is a new concept in measuring the height of cut on fine turfgrass areas with a solid glass prism and a laser. This combination shows the exact height of cut through the solid glass prism. It is designed to tell you the actual height of cut that the mower is making on the turfgrass area as well as the quality of cut. Simply place the specially designed prism directly on the golf green, tee, fairway or athletic field, and look through the instrument, sliding the specially designed laser down until you reach the tips of the cut turfgrass leaf blades. When the laser illuminates the turfgrass leaf tips, it is transposed onto

the inch or millimeter scale, showing the exact height of cut as well as the quality of cut and the overall smoothness of the surface. Also, the laser lights up the tips of any turfgrass leaf blades that have not been properly cut, easily showing problems like step cuts, stragglers, cutting unit hop, marcelling or wash boarding when viewed along the direction of cut.

The unit can also be used on artificial infill turf to determine fiber height above the infill material and uniformity of the turf fiber tips. The Grass Height Prism Gauge with Laser features graduated measurement lines that are viewed through the solid glass prism and superimposed on the turf allowing you to measure the actual height of the turfgrass and compare it with mower bench settings. The "quality" of cut may also be inspected by comparing the turf over the viewing plane of the prism.



Graduated lines are printed at 1/10th or 1.0 mm depending on the unit selected and measures grass up to 1.60 inches or 40 millimeters tall. It is ideal for inspecting golf greens, baseball infields, cricket pitches, grass tennis courts or any finely manicured place that cutting height and surface smoothness is important. Prism frame is 6 3/8 x 5 x 2 1/2 inches (16 x 13 x 6.5 cm) in size.

Turf-Tec Laser Height of Cut Prism Gauge can also be used for measuring the pile or fiber height in artificial grass athletic fields to determine if enough infill is installed between the pad and the fibers, for player safety and proper field maintenance. It is also helpful for topdressing new rubber infill and grooming.



## Specifications:

- Solid Glass Optics
- Nylon Frame (non toxic)
- Measurement scale on Metric (MM) version is 1 millimeter and 1/100th of an inch increments
- Maximum Measuring Height Scale is 1 5/8 inches or 40 mm
- Measurement Scale Shows Details down to 1 mm or 0.020 increments
- Rechargeable Laser with USB Micro B Plug
- Red Laser with 5.0 hours operating time
- Prism Measures: 6 3/8 x 5 x 2 1/2 Inches (16 x 13 x 6.5 cm)
- Prism Weight: 1 lbs 8 oz (800 g)
- Case Measures 11 x 9 x 3 1/2 inches (28 x 23 x 9 cm)
- Prism and Case Weight: 4 lbs (1.8 kg)

## Turf-Tec Laser Height of Cut Prism Gauge with case (Metric Model)

### Assembly Instructions

1. Remove the unit from the hard case
2. (First time use) Remove the protective sticker from the underside of the laser assembly
3. Laser comes fully charged, however recharging unit before first use is suggested with a USB Micro B plug (provided) and charger (not provided)
4. Loosen the thumb screws on both sides of the laser assembly
5. Position the laser assembly over the open portion of the prism gauge with the nipple facing the height of cut sticker as shown in image to the left on the non glass side of the prism. Gently press down on both sides until you hear the laser assembly click onto the two side tracks on the frame. Gently slide the laser assembly over the glass portion of the prism
6. Lightly tighten the thumbscrews until the laser aligns with the lines on the label and the laser assembly is no longer loose but still slides freely down the track



### Instructions

1. To use, simply place unit on turfgrass area to be measured, keeping the longer side along the mower's direction of cut as shown in image to the left
2. Turn on the laser by depressing the Off/On switch on the top of the laser pen
3. The weight of the unit will put the correct amount of pressure on the turf unless the turf has a thick layer of thatch or is extremely soft. If surface is extremely soft, press down slightly on unit until it sits firmly against the surface similar to the way the mower would sit on the area
4. Look directly down at the unit at a 90 degree angle while sliding the laser assembly down until the tips of the leaf blades are illuminated
5. The area just above the leaf blade tips is the exact height of cut
6. Most of the glass prism shows lines delineating the height in 1.0 millimeter increments. One side of the scale also shows measurements in 1/100<sup>th</sup> of an inch scale
7. You can also inspect the quality of cut by looking across the entire prism to be sure the turf is evenly cut. Any turf leaf blades that are illuminated above the height of cut are not being properly



Direction  
of cut

cut. Please see the QR Code and link listed below for more information about mower cutting irregularities

8. Note: These prism readings show the exact height the mower is cutting. These may differ from bench settings as the mowers bench settings are based on measuring off a metal plate between the rollers on the cutting unit. Once the mower is on the turf and soil surface, the weight of the mower, cutting units and amount of thatch, as well as soil moisture, will directly impact the cutting height
9. Infill depth can also be measured on artificial turf in the same manner to check for uniformity of infill topdressing in relation to turf tip heights



Link: [https://assets.deerequipment.com/wp-content/uploads/2022/06/10222111/golf\\_cut\\_quality.pdf](https://assets.deerequipment.com/wp-content/uploads/2022/06/10222111/golf_cut_quality.pdf)

## **Synthetic Turf**

To measure the pile height of synthetic turf, first measure the fiber length from the backing to the top of the infill with an infill depth gauge. Next, place the prism in the same area as tested with the infill depth gauge, read the height of the synthetic turf fibers from the top of the infill to the top of the synthetic turf fibers. Add these two numbers together for total fiber length.

## **HGPRISM-LASER-MM-G - Turf-Tec Laser Height of Cut Prism Gauge with case (Metric Millimeter Model)**

### **LIMITED WARRANTY OF TURF-TEC INTERNATIONAL PRODUCTS**

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