



# FS TCM500 NDVI Turf Colour Meter

## Product Images



## Short Description

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Measures reflected light from approximately a 3 inch (7.6 cm) diameter section of turfgrass

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The FieldScout TCM 500 NDVI Turf Color Meter measures reflected light from approximately a three-inch diameter section of turfgrass in the red (660nm) and near infrared (850nm) spectral bands. Using an internal light source allows the meter to negate the effect of sunny versus cloudy conditions.

# Additional Information

Brand	Spectrum Technologies
Explanation	<p>Turfgrass quality is visually evaluated by human assessors based on a scale of 1 (dead grass) to 9 (perfect grass) in the current assessment method. This evaluation practice has several disadvantages and therefore, there is the need for a better evaluation technique. Individual biases are inevitable and lead to some level of inconsistency, even among the most highly trained observers. Research from Clemson University, "Predicting Visual Quality Ratings of Turfgrass Research Plots Using Spectral Reflectance"(Muharrem, Keskin, Roy B. Dodd, Young J. Han, Ahmad Khalilian - Paper # 031114, ASAE 2003 Annual Meeting) is the basis for the technology used in this meter.</p> <p>The FieldScout TCM 500 NDVI Turf Color Meter measures reflected light from approximately a three-inch diameter section of turfgrass in the red (660nm) and near infrared (850nm) spectral bands. Using an internal light source allows the meter to negate the effect of sunny versus cloudy conditions. Data is presented as percent reflectance of red and near infrared, NDVI, and Grass Index (ie. 7.3).</p>
Contents	TCM500 meter, FieldScout software, manual, serial cable, T-Handle. The T-Handle allows readings to be taken from an upright position.
Power	Battery Only
Outdoor Unit	<ul style="list-style-type: none"><li>• Measures reflected light from approximately a 3 inch (7.6 cm) diameter section of turfgrass</li><li>• Uses an internal light source to negate the effect of sunny versus cloudy conditions</li><li>• Measures reflectance in the red (660 nm) and near infrared (850 nm) spectral bands</li><li>• Measurement diameter of 3 in (7.6 cm)</li><li>• Displays result as NDVI, percent reflectance, or as a user-adjustable grass index from 1 to 9</li><li>• Equipped with internal data logger and RS-232 port</li><li>• Records 3,250 measurements (1,350 with added GPS/DGPS option)</li></ul>

## Software

Configure and download the meter with FieldScout software (included). This data logging capability allows users to save measurements and to download to a PC (included PC cables connect to a 9-pin serial port; USB-Serial adapter (item 3661USB) required for connection to computers with only USB ports).

Get greater use out of your NDVI meter with powerful [SpecMaps](#) online web-mapping application to discover the value of spatially variable sensor measurements. [GPS/DGPS cable](#) required. [USB adapter](#) advised. Mapping program requires GPS; not included.