



## TECHNICAL SPECIFICATION

PlantPen/N-Pen N 110

<b>Protocols</b>	
Normalized Difference Greenness Index	$NDGI = (R780 - R560)/(R780 + R560)$
Nitrogen content	<ul style="list-style-type: none"> <li>- Correlated with NDGI</li> <li>- Measured in percentage</li> <li>- Calibration for maize, wheat and barley</li> </ul>
<b>LED lighting</b>	
Dual wavelength light source	565 nm and 760 nm
<b>Detector</b>	
Type	PIN photodiode with bandpass filters
Wavelength range	From 500 to 800 nm
<b>Data storage and transfer</b>	
Internal memory capacity	Up to 16 Mb
Internal data logging	Up to 100,000 measurements
Data transfer	USB cable Bluetooth (transfer up to 3Mbps for distance up to 20m)
PC software	FluorPen 1.1 (Windows 7 and higher)
<b>Battery</b>	
Type	Li-Ion rechargeable battery
Capacity	2000 mAh
Max. charging current	0.5 A
Charging	Via USB port - PC, power bank, USB charger, etc.
Battery life	70 hours typical with full operation (low battery indicator)
<b>Other</b>	
Sample holder	Mechanical leaf-clip
Display	Graphical display
Keypad	Sealed, 2-key tactile response Turns off after 5 minutes of no use
Built in GPS module	Ultra-high sensitivity down to -165dBm High accuracy of <1.5 m in 50% of trials
Size	135 x 65 x 33 mm
Weight	188 g
Operating conditions	Temperature: 0 to +55 °C Relative humidity: 0 to 95 % (non-condensing)
Storage conditions	Temperature: -10 to +60 °C Relative humidity: 0 to 95 % (non-condensing)
Warranty	1 year parts and labor