

Welcome to Issue 11 of PSI - NEWS

*This issue is dedicated to **N-Pen N 100***

Handheld Device Providing Instant and Actual Nitrogen Content Readings



- **Actual Nitrogen Content in Plants**
- **Instant Results**
- **Handheld and Battery-Powered**

Key Features:

- **Actual nitrogen content readings.**
- **Instant results.**
- Non-invasive measuring method.
- Leaf-clip for gentle sample handling.
- Fast and easily repeatable measurements.
- Ideal for quick testing throughout the growing season.
- Lightweight and compact design.
- Easy two-key operation.
- Battery-operated.

N-Pen Application:

- Saving fertilization costs.
- Significant yield increase.
- Quick tuning of nitrogen management in crops.
- Increasing nitrogen use efficiency.
- Reducing the risk of yield-limiting nitrogen deficiencies.
- Saving labor and/or application costs.
- Reducing the risk of excessive fertilizer applications and subsequent contamination of the environment.
- Agronomy research.



N-Pen Calibration:

- Maize
- Wheat
- Barley
- Calibrations for other plants may be provided.

N-Pen Sampling:

- Simply insert the leaf between the leaf clip and the optical tip.
- N-Pen collects and stores individual readings and calculates the average automatically.
- Readings should be taken on different plants of the same species.
- Readings should be taken on the 2nd (maximum 3rd) youngest leaf on each plant.
- Readings should be taken on about the same location on each leaf (close to the mid part).



Technical Specification:

- **Measured Parameters:**
Nitrogen content calibrated for particular plant - maize, wheat, barley
- **Measuring Light:**
Dual wavelength light source - 525 nm, 780 nm.
- **Detector Wavelength Range:**
500 to 800 nm bandpass filters.
- **Memory Capacity:**
Up to 4 Mb.
- **Internal Data Logging:**
Up to 100,000 data points.
- **Display:**
2 x 8 characters LC display.
- **Keypad:**
Sealed, 2-key tactile response.
- **Keypad Escape Time:**
Turns off after 3 minutes of no use.
- **Power Supply:**
4 AAA alkaline or rechargeable batteries.
- **Battery Life:**
48 hours typical with full operation.
- **Size:**
170 x 57 x 30 mm; 6.7" x 2.2" x 1.2".
- **Weight:**
180 g, 6.5 oz.
- **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.

§ This newsletter was sent by the Photon Systems Instruments, Drasov 470, 664 24 Drasov, Czech Republic, ph. +420 511 440 011, <http://www.psi.cz>

§ We are happy to consult your exact requirements. Please contact us for detailed information and price at info@psi.cz