

RAYN Release Notes

RAYN Photo Sensor

Product Line:	RAYN Photo Sensor (RPS)
Description:	Version 1.0.1 Firmware
Effective Date:	2023-06-20

Purpose

This release incorporates firmware improvements for the RAYN Photo Sensor (RPS), saving energy during low-light (or no-light) periods and significantly extending the sensor's operational time. For any questions relating to the contents of this release or the behavior of this software, please contact RAYN Technical Services using the contact information at the bottom of this page.

Documentation

Current documentation includes the *RAYN Photo Sensor Installation Guide*. Please keep this release note with your installation guide for descriptions of the newest features, changes, and bug fixes. RAYN manuals are in portable document format (pdf) and are available for download at rayngrowingsystems.com.

Compatibility

This release is compatible with the following RAYN hardware and software:

- RAYN Touch Controller
- RAYN Syrcadia Software - version 2.0.2 and later software

Key Enhancements in v1.0.1

Modified the measurement samples taken in low-light or no-light level environments to extend the solar-charged operation period.

Initial Features in v1.0.0

- Solar powered wireless Photo sensor for monitoring of PPFD
- Works in conjunction with the RAYN Touch Controller and Syrcadia software
- Measures 0–4000 PPFD ($\mu\text{mol/s/m}^2$)
- Reliable radio reception range of 24 m (80 ft) – free field, up to 100 m (330 ft) line of sight
- Up to 48 hours operation in complete darkness
- Quick start operation at low-light level with minimal charging time
- Batteries not required, start assist battery optional
- Mounted inside an ingress protection IP67 rated enclosure

Installation Instructions

New sensors ship with the current version of firmware installed and do not require update before use. Firmware is not field-upgradable. Please contact RAYN Technical Services if an upgrade is required.

Issues Corrected in v1.0.1

SENSE-1 -- Code improvements to save energy during no-light periods to significantly extend operational time

