

NLAS100 Astra Sensor

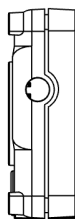
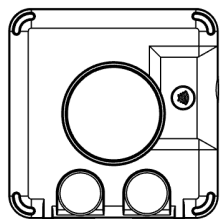
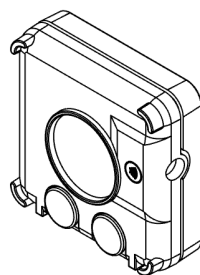
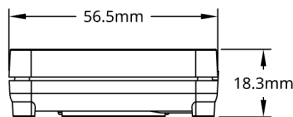
Wireless water leak and temperature sensing for Astra systems

OVERVIEW

The NLAS100, also called Astra Sensor, is the detection and alert layer of the Astra system. Compact and wireless, it detects water leaks whether installed flat or on its side, monitors freeze-risk temperatures with configurable thresholds, and reports displacement or extension-cable state changes. It communicates over LoRa to a gateway or directly to an Astra Panel using Nebulab Umbra P2P.

FEATURES

- Configurable temperature monitoring with up to 8 thresholds for freeze-risk and anomaly alerts
- Raised stainless-steel probes detect water when installed flat or on the side
- Magnetic base supports fast installation and displacement supervision
- 3.5 mm connector supports optional leak detection extensions for hard-to-reach spaces
- LoRa to gateway or Umbra P2P direct to the panel
- Reports on threshold events, water detect and clear events, displacement events, extension plug and unplug events, periodic check-ins, and error conditions
- Built-in audible alarm helps locate the alerting sensor
- RFID and QR-assisted pairing simplifies installation
- Powered by two AAA batteries for up to 7 years of operation



SPECIFICATIONS

Model	NLAS100
Water detection	Via two stainless-steel conductive probes
Temperature detection range	$\pm 0.5^{\circ}\text{C}$ (0°C to $+65^{\circ}\text{C}$, typical) $\pm 1.0^{\circ}\text{C}$ (-40°C to $+125^{\circ}\text{C}$, maximum)
Power	2x AAA batteries, up to 7 years
Battery life	Up to 7 years
Buzzer	Buzzer, 85 dB, 2.7 kHz tone
Communication	LoRa to gateway or Umbra P2P protocol
Enclosure	ABS
Prob Material	Stainless Steel
Mounting	Magnetic adhesive base
Dimensions	56.5 mm x 56.5 mm x 18.3 mm
Conditions	5–95% RH non-condensing; -10°C to $+60^{\circ}\text{C}$
LoRa Module	IC: 35327-NLAS100

FUNCTIONAL DESCRIPTION

The NLAS100 wakes and reports when water bridges its probes or an attached extension, when configured thresholds are crossed, and when displacement or extension-state changes are detected. It also sends periodic check-ins so the Astra system can monitor battery, temperature, signal health, and sensor status over time.

WARRANTY

Nebulab Technologies Inc. warrants that for a period of 2 years from the date of purchase, this product is free from defects in material and workmanship. This warranty does not apply to damage caused by shipping or handling, or damage caused by accident, abuse, misuse, misapplication, ordinary wear, improper maintenance, failure to follow instructions or because of any unauthorized modifications. If there is a defect in materials and workmanship under normal use within the warranty period Nebulab Technologies Inc. shall, at its option, repair or replace the defective equipment upon return of the equipment to the original point of purchase. The foregoing warranty applies only to the original buyer and is in lieu of all other warranties, whether expressed or implied, and of all other obligations or liabilities on the part of Nebulab Technologies Inc. Nebulab Technologies Inc. neither assumes responsibility for, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty. The maximum liability for Nebulab Technologies Inc. under all circumstances for any warranty issue shall be limited to a replacement of the defective product. It is recommended that the customer check their equipment on a regular basis for proper operation.