NEBU | LAB

PRODUCT DATA SHEET

NLAP100 Astra Panel

Local command center for Astra water protection systems

Overview

The NLAP100, is the local command center of an Astra water prevention system. It coordinates Astra Sensors, motorized valves, wired extensions, processes telemetry locally, and keeps protection active even when cloud connectivity is unavailable.

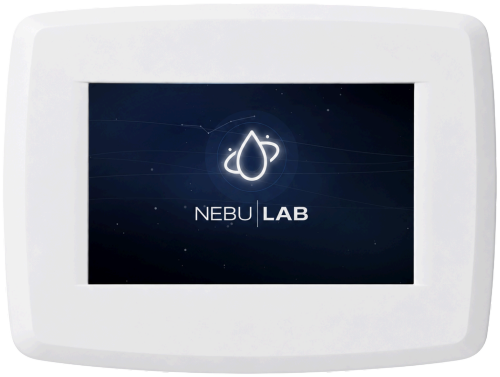
The panel provides local alarms, manual valve actions, and synchronized cloud visibility through the Nebulab IoT application. A built-in 4.3-inch touchscreen supports local status, alarm handling, and guided actions while advanced setup and management are completed in the online platform..

Features

- LoRa to a gateway or Wi-Fi uplink for cloud connectivity
- Secure Umbra P2P communication with sensors
- Integrated buzzer for local alarm awareness
- Onboard temperature and water sensing for local visibility
- Wired communication bus for extensions
- Supports 2 motorized valves with status indication
- Manual and automated valve control, including scheduled valve cycling
- 4.3-inch capacitive touchscreen for local alarms, status, and guided actions
- Wall-mounted enclosure with concealed rear cable entry
- (Q4 release) Wi-Fi Mesh between Astra Panels for shared on-site connectivity

Typical Applications

- Multi-unit residential water management systems
- Commercial building leak detection and valve control
- Sites that need local control with or without continuous cloud connectivity



Specifications

Model	NLAP100
Languages	English, French
Enclosure	White ABS
Display	4.3" capacitive touchscreen, 480 × 272 px
Temperature detection range	±0.5°C (0°C to +65°C, typical) ±1.0°C (–40°C to +125°C, maximum)
Power	12 V DC adapter
Communication	LoRa, Wi-Fi, proprietary Umbra P2P
Buzzer	Alarm Buzzer, 85 dB, 2.7 kHz tone
Valve Support	2 × 5-wire motorized valves with status
Auxiliary Ports	Wire water detection or sensor bus
Mounting	Wall-mounted
Dimensions	140 mm × 100 mm × 24 mm
LoRa/Wifi Module	IC: 25908-3112 FCC ID: 2AF6B-3112

Functional Description

The NLAP100 aggregates sensor and flow data, evaluates events locally, and orchestrates valve actions with low-latency Umbra P2P communication. When connected to the cloud, it synchronizes system status, history, and configuration while keeping on-site protection responsive.

The touchscreen supports local alarm handling and manual control, while advanced setup, provisioning, and system management are completed in the Nebulab IoT application.

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.