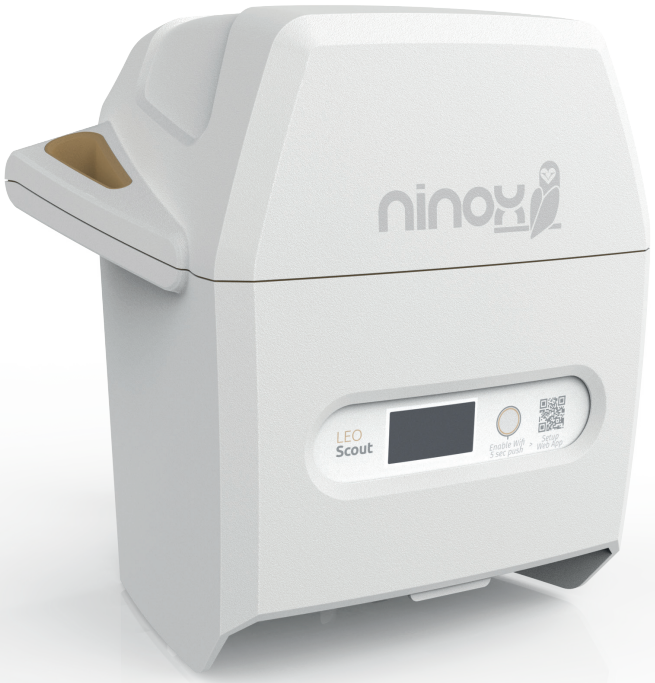
LEO Scout™

TELEMETRY MADE EASY

The Ninox LEO Scout is a reliable and user-friendly data logging and telemetry device that meets all non-urban water metering telemetry requirements. Installation is easy, and the IP68 rating eliminates the need for an additional housing. The device's interaction is tailored to meet state-based requirements, and essential information is displayed on the OLED screen.

Scout automatically selects its most viable communication path, switching to low-cost satellite if cellular coverage is intermittent or lost.

Designed in consultation with installers and regulators, the LEO Scout offers an easy-to-use telemetry solution for remote locations or critical sites. At Ninox, we listen.



KEY FEATURES

Remote Area Operation

Integrated low earth orbit duplex satellite capability provides low-cost connectivity in sites well beyond the cellular network. This feature also allows for communications redundancy in high priority sites within cellular coverage.

Ease of Use

Factory configured, or setup using the wi-fi webtool, ensures a speedy and simple install. The LEO Scout provides immediate feedback via an integrated OLED screen.

Data on an Operational Time Scale

The LEO Scout is capable of reading and transmitting meter data every 15 minutes, when using the cellular network. This allows the entitlement holder an opportunity to remotely monitor and manage their water allocation in near real time.

Pre-Configured Meter Support

AS4747 water meters and a limited range of environmental sensors have factory built configurations ready to go. These configurations make installation that much easier and faster.

Field Replaceable Smart Batteries

Ninox smart batteries provide extended service intervals and up to two years of battery life for 15-minute read and transmit cycles. It can be changed in the field without interruption to device function.

Low Maintenance

Designed to withstand the most challenging of conditions, the IP68 LEO Scout is impervious to dust and moisture ingress. Constructed from tough UV stabilised resin, the LEO Scout is designed to last.

Secure

LEO Scout is tested to UL2900 cyber-security standards, with security features such as secure-boot, data encryption, Transfer Layer Security on wireless interfaces, and 2FA on USB/Wi-Fi connection. Tamper evidence seal point, cable cut, and device opening alarms ensure data integrity – end to end.

APPLICATIONS

Water Metering

The LEO Scout has been designed to meet the requirements of the non-urban water metering reform that is taking place in Australia. Each jurisdiction has been consulted and while several approaches are being adopted to meet the Meteorological Assurance Framework, LEO Scout meets them all.

Environmental Monitoring

The LEO Scout offers a cost effective and versatile logging telemetry platform for use in environmental monitoring application with either ModBus or Pulse sensors. From simple float switches, and rain gauges, through to level sensors and other meteorological parameters, LEO Scout has you covered.

Industrial use

Looking for a low cost, reliable way to transmit your site data? LEO Scout is ready to go. The onboard configuration tool allows the user to set their measurement parameters and transmit to their existing end point.

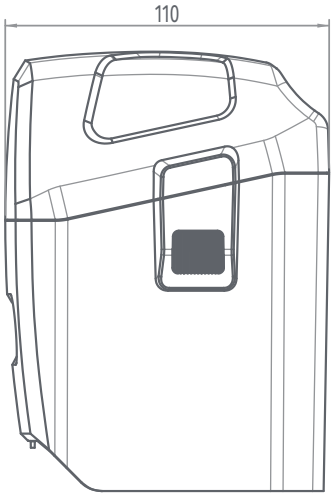
LEO **Scout** Datasheet

TECHNICAL SPECIFICATIONS

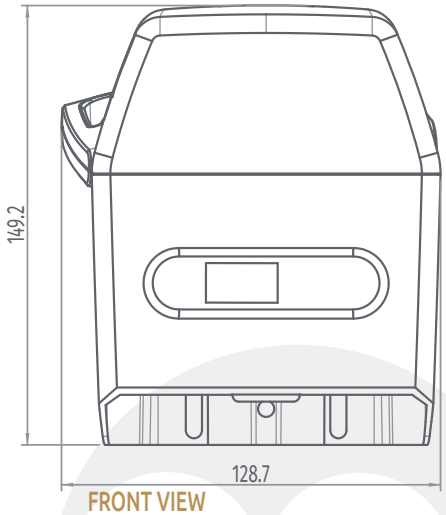
COUNTRY OF ORIGIN	Designed and assembled in Australia
ENVIRONMENTAL	•Operating Temp -10°C to +75°C •Storage Temp -10°C to +75°C •Ingress Protection IP68
INPUT TYPES	•Pulse •Modbus over RS485
CONNECTORS	•M12 5 Pin Male External Sensor Connector •Female SMA (LTE)
SENSOR SAMPLING RATE	•Remotely Configurable •Range: 15 min (default) to monthly
DATA PUBLISH RATE	•Remotely Configurable •Range: 15 min to monthly •Default: Once per hour
COMMUNICATIONS	•Protocols: HTTPS, SFTP, FTPS, MQTTS •Firmware-Over-The-Air (FOTA) supported •Platform Agnostic for AWS, Azure and others
RADIOS	•Primary Telemetry CAT M1 / NB-IoT •Secondary Telemetry AstroCast LEO Satellite •GPS •Wi-Fi
GPS & TIME	•GPS accuracy within 30m •Time Syncing occurs every publish interval •Onboard Real-Time Clock (RTC)
MEMORY	Integrated internal FLASH •2+ Years @ 15min sampling* •5+ Years @ 1hr sampling* (Varies with sample data size)
BATTERY	•Type Replaceable Primary Cell •Chemistry LiSoCl2 •Battery Life 5+yr @ 1hr sampling, Daily transmission*
ANTI-TAMPER	•Locking Ring for ∅9mm shank padlock & Tamper Tag •Tamper Tag on Batter Door •Internal Electronic Tamper Switch •Cable Cut detection on sensor cable
MATERIALS	UV Resistant, Weatherable Plastic
REGULATIONS & APPROVALS	RCM, RoHS

**** Varies depending on application and configuration***

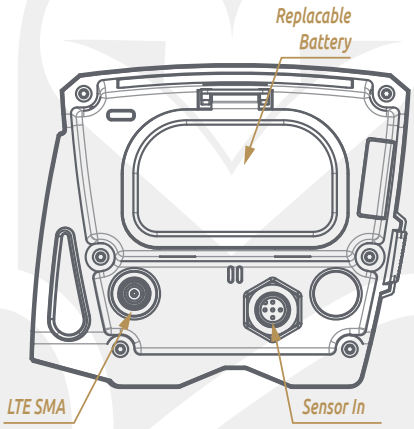
Ninox embraces a policy of continuing improvement in design and performance of its products. While every effort is made to ensure the information given is accurate, specifications are subject to change without notice.



SIDE VIEW



FRONT VIEW



BOTTOM VIEW - Mounting bracket not shown

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