Offshore Nomad Drifter

Quick Start Guide

SouthTEK Sensing Technologies

SouthTEK Sensing Technologies S.L. 2013.
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For more details, please refer to www.southteksl.com

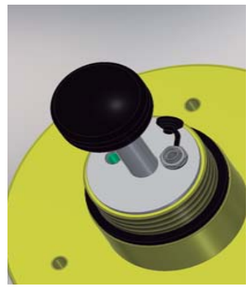
Everyday use of the Nomad drifter

Turning on the drifter

1. Unscrew cap from the floater.
2. Disconnect the dummy plug (this will automatically switch on the drifter) and set the rubber protection in place.

3. Screw cap firmly onto floater, hand tight, ensuring proper seating of the gasket around its entire circumference.
4. The buoy is now ready for deployment. Please confirm proper communications through the web application: http://ldmanager.southteksl.com
5. To switch off the drifter just connect the dummy plug.

Charging the internal battery



6. Plug the charger.

The status light on the charger indicates charging status (red charging, green charged).

Once the internal battery has finished charging, the NOMAD is ready for use.

The LiPo batteries are sent at 40% of capacity. Fully charge the batteries before deployment.

Caution!

Users of Lithium polymer (LiPo) batteries should take extreme care when handling such batteries. Legislation regarding disposal of LiPo batteries vary from country to country.

LD Manager Application

Logging in web application
http://ldmanager.southteksl.com

LD Manager app available on Play Store

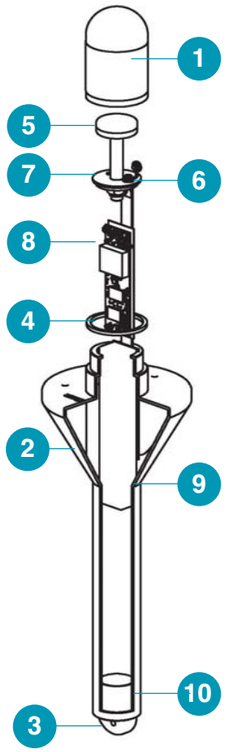
Google Play

Key features

- Cost-effective drifter
- Offshore applications
- User friendly software
- Robust, precise and handy
- GPS, GLONASS and GALILEO tracking
- Global Iridium bidirectional communication
- Flexible deployment: from an infratable boat to an aircraft carrier
- Continuous working mode up to several months depending on user configured intervals for transmission and position sampling

SouthTEK Sensing Technologies S.L. is not responsible for any direct or indirect damages resulting from the use of these devices

Specifications



1. Cap
2. Floater
3. Drogue attachment eye
4. Gasket
5. Antenna GPS/Iridium
6. Charge connector
7. LED indicator
8. Electronic device
9. Battery
10. Ballast

Iridium	Frequency range 1616 MHz to 1626.5 MHz
SBD	Duplexing method TDD
GNSS	Receiver 32 channels GPS/GALILEO/SBAS: L1 1575.42 MHz GLONASS: L1 1597.5 MHz Accuracy position 5 m Hot start < 3.5 sec Warm start < 33 sec Cold start < 34 sec
Proccesor	ARM Core
Memory	1.7MB (RAM) and 8 MB (Flash)
Battery	Lithium polymer (LiPo) Capacity standard 20400 mAh Nominal = 3.7V
Antennas	Iridium: 2 dBi GNSS: 2.5 dBi
Charging conditions	DC 4.2V 2A max
Dimensions	72 cm x 22 cm x 22 cm
Weight	2900 gr

LED Indicators

- Started (Running or idle mode).
- Searching (GNSS and comm. signals).
- Error (Device anormal functionality).

LED indicatos.

For a detailed description of led flashing pattern, please refer to Application Note #202 at
http://www.southteksl.com/index.php/downloads

Accesories

Charger (2A)

Pila (Drogue)

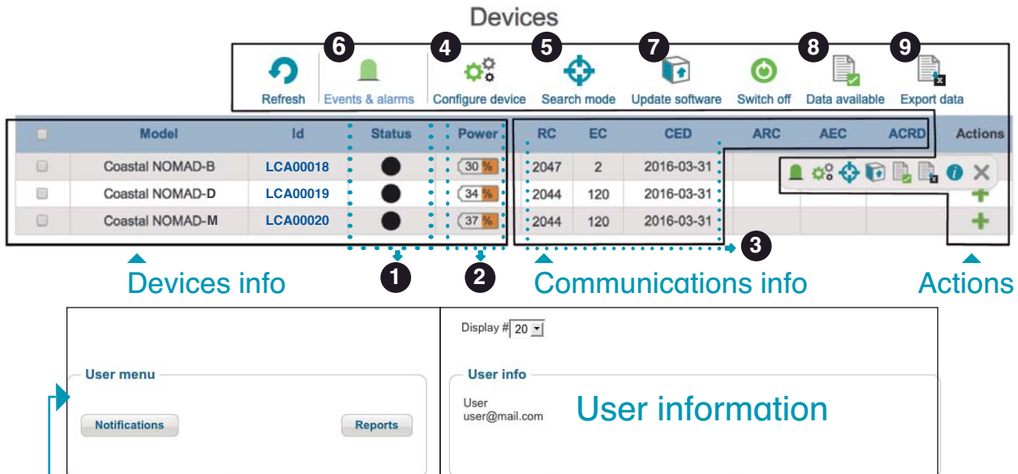
Satis (Drogue)

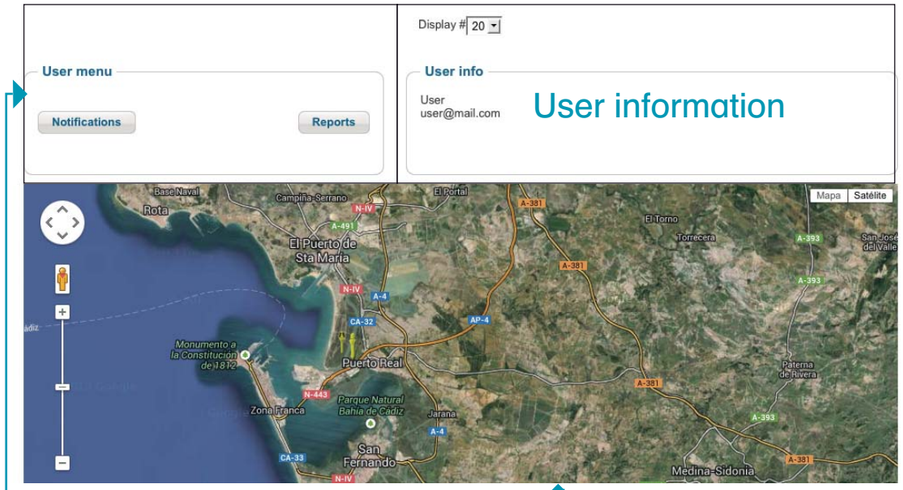
Firma (Drogue)

LD Manager: Web application

7 Main screeen of LD Manager

LDManager v2.1.5





1 Status

- Started.
- Started with warnings.
- Startup error.
- Online
- Offline
- Lapsed
- Online with warning

2 Battery power

- Full battery
- Medium battery
- Low battery
- Very low battery

3

RC
Remaining connections

EC
Estimated consumption (conns/hour)

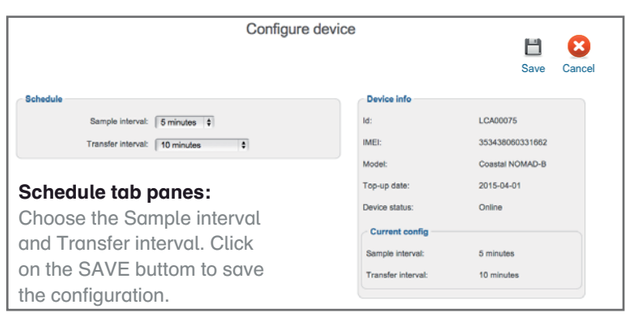
CED
Credit expiration date

4

Configure device

- Configure device
- Config change in process (with motion)
- Error changing config

Battery life will depend on GSM coverage and sampling/transfer interval.



Schedule tab panes:
Choose the Sample interval and Transfer interval. Click on the SAVE buttom to save the configuration.

5 Search mode

SEARCH MODE can be activated or deactivated through LD Manager (below figure) or sent by e-mail (right figure). It becomes operational after the first connection with the drifter.

SEARCH MODE transfers the drifter position via email every five minutes (default) or other user-defined interval.

Activation/deactivation SEARCH MODE through LDManager:

Activate SEARCH MODE to recover easily the drifter including the recipient email and click on Apply button.

Deactivate SEACH MODE clicking on Deny button.

Activation/deactivation SEARCH MODE from e-mail:

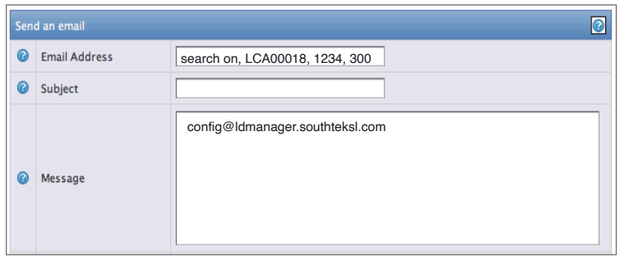
Send an e-mail to: config@ldmanager.southteksl.com

To activate -> Message:

search on, DRIFTER ID, PASSWORD, SAMPLE INTERVAL* (in sec)

To deactivate -> Message:

search off, DRIFTER ID, PASSWORD



6 Events & alarms

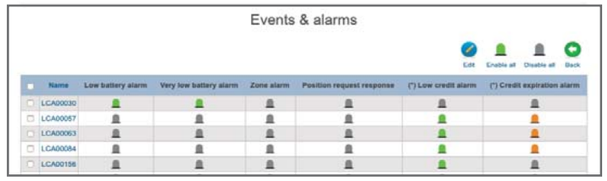
Alarms:

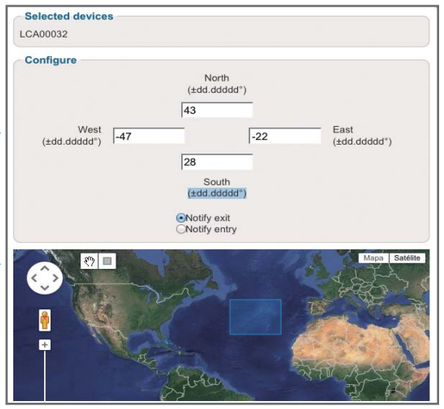
Low Battery, Very Low Battery and Zone alarm.

Enabled Disabled Alarms notified

Zone alarm:

Notifies exit or entry in the area chosen by the user. Insert coordinates or use the map tool chose the area of interest.



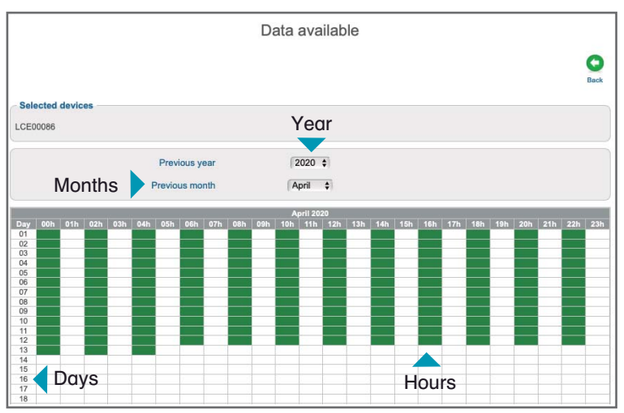


7 Update software

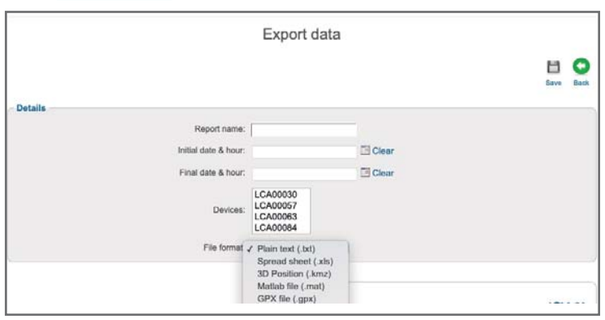
- Software version OK.
- Software update request not allowed.
- New software version available.
- Soft. version update in progress (with motion).
- Error updating software version.

8 Data available

Green squares represent data availability.
Year and month can be selected for each device.



9 Export data



a) Include the Report name.
b) Select the initial and final date for data export.
c) Choose the Devices for data export.
d) Choose file format for data export.