

Coastal Nomad Drifter



Quick Start Guide



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

Key features

- Cost-effective drifter
- Coastal applications
- User friendly software
- Robust, precise and handy
- GPS, GLONASS and GALILEO tracking
- GSM coverage and communications
- 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

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

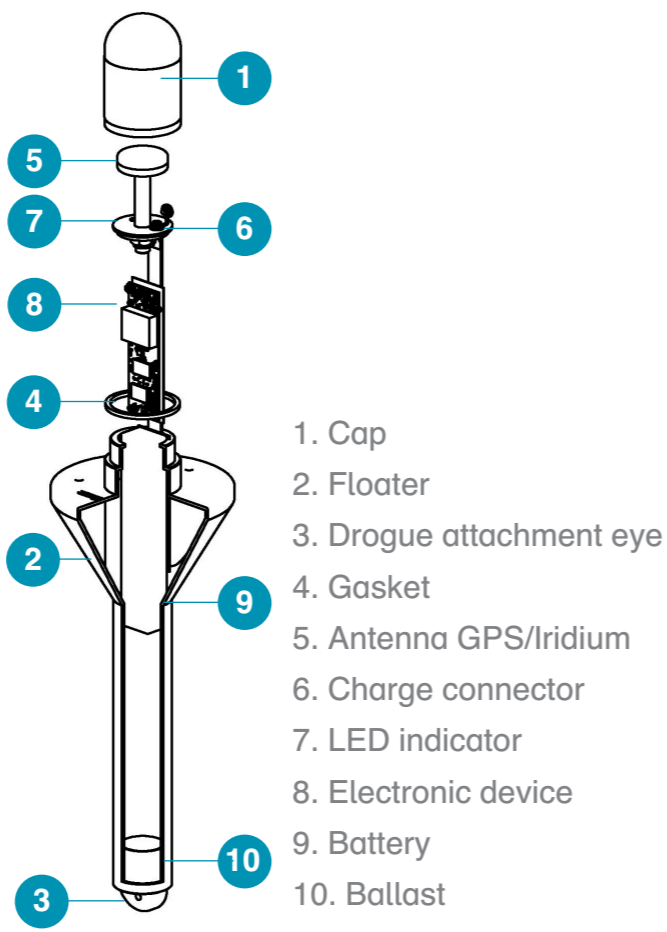
6. Logging in web application

<http://ldmanager.southteksl.com>

LD Manager app available on Play Store



Specifications



GSM	Quad-Band GSM 850/900/1800/1900 MHz
GPRS	Multi-slot class 12
GNSS	Receiver 32 channels
	GPS/GALILEO/SBAS: L1 1575.42 MHz GLONASS: L1 1597.5 MHz
Processor	ARM Core
Memory	5 MB (RAM) and 10 MB (Flash)
Battery	Lithium polymer (LiPo) Capacity standard 20400 mAh (Type M) 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	2895 gr

LED Indicators

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

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

Accesories



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Main screen of LD Manager LDManager v2.1.5

Model	Id	Status	Power	RC	EC	CED	ARC	AEC	ACRD	Actions
Coastal NOMAD-B	LCA00018	●	30%	2047	2	2016-03-31				[Icons]
Coastal NOMAD-D	LCA00019	●	34%	2044	120	2016-03-31				[Icons]
Coastal NOMAD-M	LCA00020	●	37%	2044	120	2016-03-31				[Icons]

Devices info

Communications info

Actions

User menu

Notifications Reports

User info

User: user@mail.com

User information

Click Notifications button: you can include your e-mail to receive the alarms generated by the device. Location of last position acquired

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 button 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.

Id: LCA00018
Sample interval: 5 minutes
Recipient email: [input field]

Activation/deactivation SEARCH MODE through LDManager:

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

Deactivate SEARCH MODE clicking on Deny button.

Activation/deactivation SEARCH MODE from e-mail:

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

To activate -> Message:

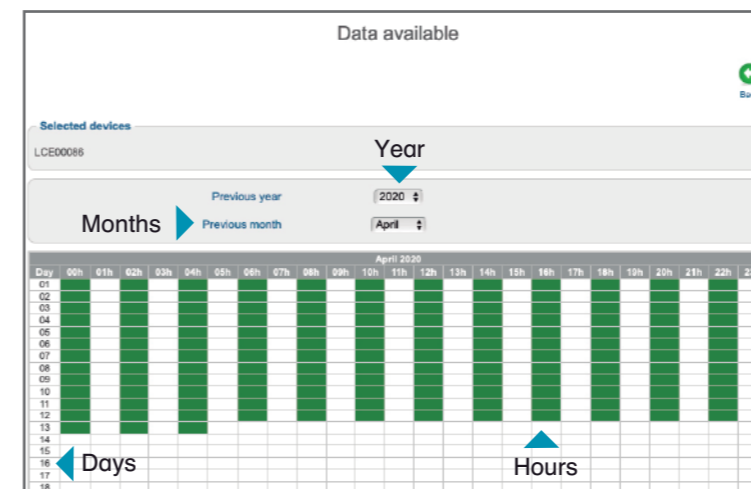
search on, DRIFTER ID, PASSWORD, SAMPLE INTERVAL* (in sec)

To deactivate -> Message:

search off, DRIFTER ID, PASSWORD

Email Address: search on, LCA00018, 1234, 300
Subject: [input field]
Message: config@ldmanager.southteksl.com

Selected devices: LCE00086
Year: 2020
Month: April



6 Alarms: Events & alarms

- 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.

Name	Low battery alarm	Very low battery alarm	Zone alarm	Position request response	Low credit alarm	Credit expiration alarm
LCA00030	●	●	●	●	●	●
LCA00037	●	●	●	●	●	●
LCA00063	●	●	●	●	●	●
LCA00084	●	●	●	●	●	●
LCA00156	●	●	●	●	●	●

Coordinates

North (add.dddd): 43
West (add.dddd): -47
East (add.dddd): -22
South (add.dddd): 28

Map tool

- ### 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.

9 Export data

Report name: [input field]
Initial date & hour: [input field] [input field]
Final date & hour: [input field] [input field]
Devices: LCA00030, LCA00037, LCA00063, LCA00084
File format: Plain text (.txt), Spread sheet (.xls), 3D Position (.kml), Matlab file (.mat), GPX file (.gpx)

- 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.