

# Offshore Nomad Drifter

## Quick Start Guide



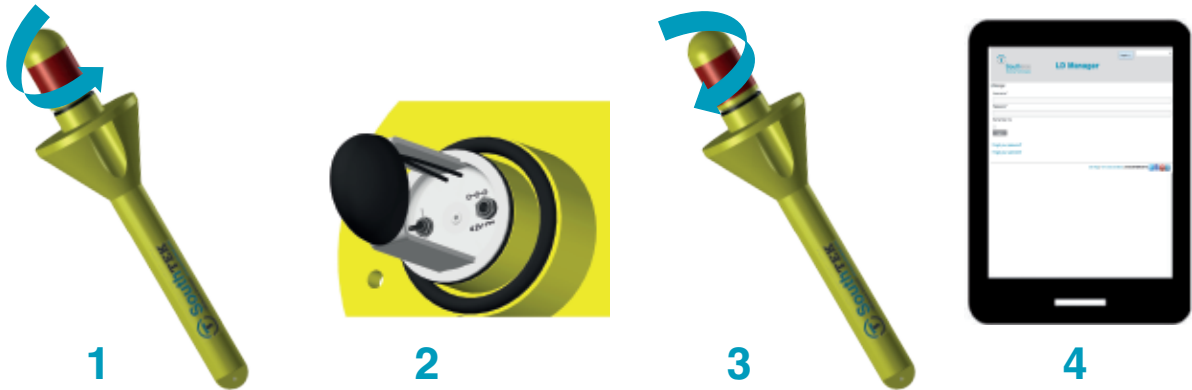
### Key features

- 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 inflatable boat to an aircraft carrier
- Continuous working mode up to several months depending on user configured intervals for transmission and position sampling



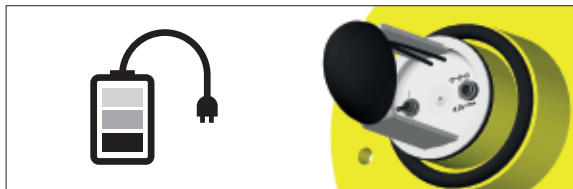
## Everyday use of the Offshore Nomad drifter

### Turning on the drifter



1. Unscrew cap from the floater.
2. Move the switch of the localizer to the ON (I) position.
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 **LDManager**:  
<http://ldmanager.southteksl.com>

### Charging the internal battery



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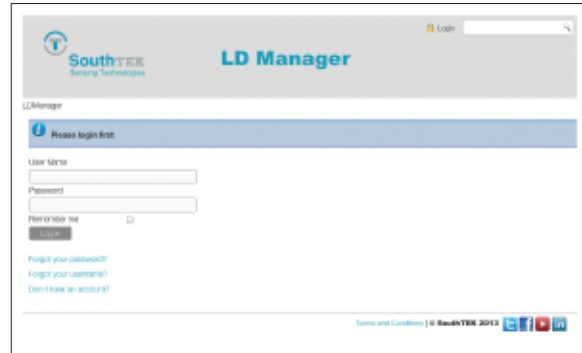
5. Insert the connector of the appropriate charger into the localizer.  
The status light on the charger indicates charging status (red charging, green charged).  
Assure that the ON/OFF switch of the localizer is in the OFF(0) position.  
Once the internal battery has finished charging, the NOMAD is ready for use.

**Battery Life Estimation.** To estimate the battery life for the drifter, you can see the Application Note #211 in <http://www.southteksl.com/index.php/downloads>

**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: Web application

6. Logging in web application  
<http://ldmanager.southteksl.com>



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7. Main screen of LD Manager

## LDManager v2.0

7

Devices

Refresh Events & alarms Configure device Search mode Update software Data available Export data

	Model	Id	Status	Power	RC	EC	CED	ARC	AEC	ACRD	Actions
<input type="checkbox"/>	Offshore NOMAD	LCE00018	●	30 %							
<input type="checkbox"/>	Offshore NOMAD	LCE00019	●	34 %							
<input type="checkbox"/>	Offshore NOMAD	LCE00020	●	37 %				289	12	2015-01-15	

Devices info Communications info Actions

Display # 20

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


# LD Manager: Web application


## LDManager v2.0


 Refresh


 Events & alarms










 **4** Configure device

 **5** Search mode

 **7** Update software

 **8** Data available

 **9** Export data

	Model	Id	Status	Power	RC	EC	CED	ARC	AEC	ACRD	Actions
<input type="checkbox"/>	Offshore NOMAD	LCE00018						59	12	2015-01-15	
<input type="checkbox"/>	Offshore NOMAD	LCE00019						353	1	2015-01-15	
<input type="checkbox"/>	Offshore NOMAD	LCE00020						289	12	2015-01-15	


**1**


**2**


**3**


**1**


### Status


 Started.


 Started with warnings.

 Startup error.

 Offline


 Online


 Lapsed


 Online with warnings


**2**

### Battery power

 Full battery

 Medium battery

 Low battery

 Very low battery

**3**

### ARC

Alternative remaining connections


### AEC


Alternative estimated consumption (conns/day)


### ACRD

Credit alternative renewal date

**4**

 Configure device

 Config change in process (with motion)

 Error changing config

Configure device

Battery life will depend on sampling/transfer interval.

**Schedule**

Sample interval: 2 hours

Transfer interval: 2 hours

Save Cancel

**Device info**

Id: LCE00018

IMEI: 300434080043570

Model: Offshore NOMAD

Device status: Online

**Current config**

Sample interval: 2 hours


Transfer interval: 2 hours


### Schedule tab panes:


Choose the Sample interval and Transfer interval. Click on the SAVE button to save the configuration.


**5**

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.

 Search mode

 Apply

 Deny

 Cancel

**Schedule**

Id: LCE00018

Sample interval: 5 minutes

Recipient email:

### 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 activate/deactivate SEARCH MODE  
E-mail address: config@ldmanager.southteksl.com

To activate -> Message  
search on, DRIFTER ID, PASSWORD, SAMPLE INTERVAL\* (in sec)

To deactivate -> Message  
search off, DRIFTER ID, PASSWORD

\* Sample interval of 600 seconds by default

**Send an email**

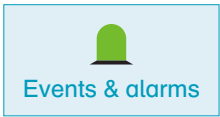
Email Address: config@ldmanager.southteksl.com

Subject:

Message: search on, LCE00018, 1234, 600

# LD Manager: Web application

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Alarms: Low Battery, Very Low Battery and Zone alarm.

Events & alarms

- Enabled
- Disabled
- Alarms notified

Device: LCA00048

Name	Status	
(*) Credit expiration alarm		
Low battery alarm		
(*) Low credit alarm		
Position request response		
Very low battery alarm		
Zone alarm		<a href="#">Edit</a>



**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.

Selected devices

LCA00032

Configure

North  
(±dd.ddddd°)

43

West  
(±dd.ddddd°)

-47

East  
(±dd.ddddd°)

-22

South  
(±dd.ddddd°)

28

☒ Notify exit

☐ Notify entry

Mapa

Satélite

Coordinates

Map tool

7



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

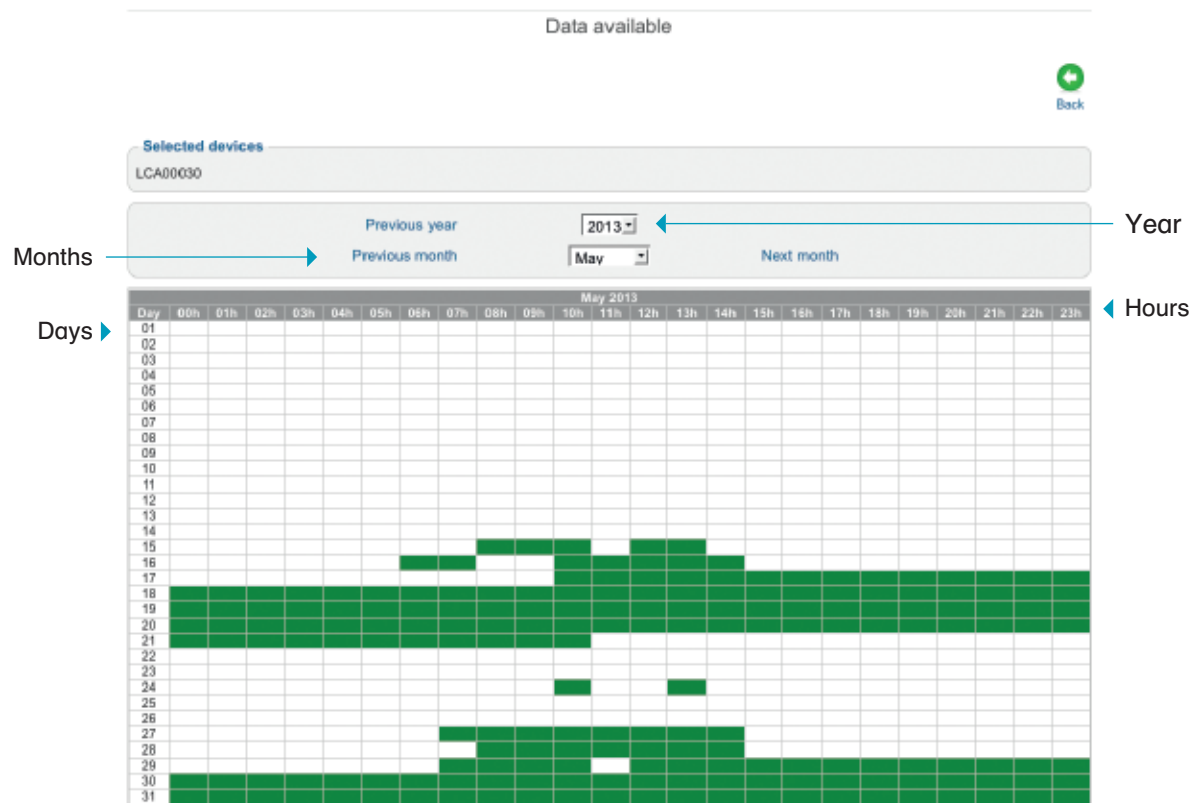
## LD Manager: Web application

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Data available

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





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Export data


Export data

 Save  Back

**Details**

**a** Report name:

**b** Initial date & hour: 2012-11-15 00:00:00 

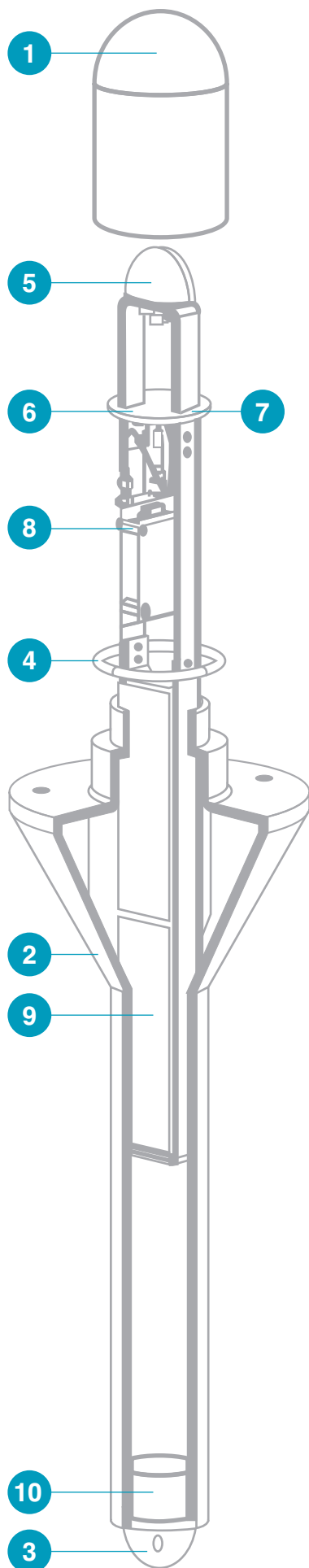
Final date & hour: 2012-11-19 12:59:59 

**c** Devices:

**d** File format: 

- Plain text (.txt)
- Plain text (.txt)
- Spread sheet (.xls)
- 3D Position (.kmz)
- Matlab file (.mat)

- Include the Report name.
- Select the initial and final date for data export.
- Choose the Devices for data export.
- Choose file format for data export.



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

## Specifications

<b>Iridium</b>	Frequency range 1616 MHz to 1626.5 MHz
<b>SBD</b>	Duplexing method TDD (Time Domain Duplex)
<b>GNSS</b>	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
<b>Processor</b>	ARM Core
<b>Memory</b>	1.7MB (RAM) and 8 MB (Flash)
<b>Battery</b>	Lithium polymer (LiPo) Capacity 20400 mAh Nominal = 3.7V
<b>Antennas</b>	Iridium: 2 dBi GNSS: 2.5 dBi
<b>Charging conditions</b>	DC 4.2V 2A max
<b>Dimensions</b>	72 cm x 22 cm x 22 cm
<b>Weight</b>	2900 gr

## Accessories



Charger  
(2A)



Pila  
(Drogue)



Satis  
(Drogue)



Firma  
(Drogue)

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