

Package ‘readosense’

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Title Imports Log and Data Files from Eosense Flux Chambers

Version 0.0.1

Date 2026-01-30

Description Imports log and data files from ``Eosense" ecosystem gas flux chambers into dataframes that can directly be used with ``flexible" by Gaudard et al (2025) <[doi:10.1111/2041-210X.70161](https://doi.org/10.1111/2041-210X.70161)>.

License GPL (>= 3)

Encoding UTF-8

RoxygenNote 7.3.3

Imports dplyr, lubridate, purrr, readr, rlang, tidyr

Suggests testthat (>= 3.0.0)

Depends R (>= 4.1)

Config/testthat/edition 3

URL <https://jogaudard.github.io/readosense/>

BugReports <https://github.com/jogaudard/readosense/issues>

NeedsCompilation no

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eo_data	<i>imports data files from Eosense chambers</i>
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Description

imports data files from Eosense chambers

Usage

```
eo_data(path)
```

Arguments

path location of the data files

Value

a dataframe with continuous measurement with timestamps

Examples

```
path <- system.file("extdata/ex_data", package = "readosense")
eo_data(path)
```

eo_env	<i>extracts the environmental data from the logs</i>
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Description

extracts the environmental data from the logs

Usage

```
eo_env(logs)
```

Arguments

logs as provided by [eo_import_logs](#)

Value

a dataframe with the datetime, air temperature (celsius), and pressure (atm) for all chambers

Examples

```
path <- system.file("extdata/ex_logs", package = "readosense")
eo_import_logs(path) |>
eo_env()
```

eo_import_logs	<i>imports log files from Eosense chambers</i>
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Description

imports log files from Eosense chambers

Usage

```
eo_import_logs(  
  path,  
  closed = c(1:3),  
  open = 0,  
  fully_closed = 1,  
  colnames = c("port", "valvestatus", "chamberstatus", "aux1", "aux2", "aux3", "aux4",  
    "aux5", "temperaturev", "pressure"),  
  nb_ports = 12  
)
```

Arguments

path	folder in which the log files are located
closed	status numbers indicating chamber is closed
open	status numbers indicating chamber is open
fully_closed	status number indicating the chamber is fully closed
colnames	column names as defined in Eosense documentation
nb_ports	number of ports

Value

a dataframe with all the information from the logs and measurement id

Examples

```
path <- system.file("extdata/ex_logs", package = "readosense")  
eo_import_logs(path)
```

eo_logs	<i>extracts the measurements metadata from the logs</i>
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Description

extracts the measurements metadata from the logs

Usage

```
eo_logs(logs, time_buffer = 300)
```

Arguments

logs as provided by [eo_import_logs](#)
time_buffer around the full closure of the chamber in seconds

Value

a dataframe with the measurement ids, port, and closing and opening time

Examples

```
path <- system.file("extdata/ex_logs", package = "readosense")  
eo_import_logs(path) |>  
eo_logs()
```

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