A logo of a company

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API User’s Guide

Version 1.1

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# Authentication

The API uses simple JWT token. Use the following endpoint to get a token:

<https://data3.biomark.com/api/v1/token> (POST)

Post data: email and password.

Returns access token (will remain active for 15 minutes).

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The obtained access token is then placed in the header when calling BioLogic’s API endpoints.

Key: Authorization

Value: Bearer <access-token>

Example:

A screenshot of a computer

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Test Authorization:

<https://data3.biomark.com/api/v1/hello> (GET)

If authorization successful, will return “Hello World!”

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# Verify Access:

<https://data3.biomark.com/api/v1/authorized_sites>

Will return all sites user is authorized to access.

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# Data Endpoints

For the following endpoints, replace <site> with your 3 character site code.

## Site Info

Get site info

[https://data3.biomark.com/api/v1/siteinfo/<site>/](https://data3.biomark.com/api/v1/siteinfo/%3csite%3e/)

Will return information about the site

[

{

"name": "BioLogic Demo",

"slug": "DEMO",

"latitude": "43.61083440",

"longitude": "-116.21083100",

"is\_ptagis\_site": **false**,

"timezone": "America/Boise",

"country": "US",

"readers": [

{

"code": "01",

"reader\_type": {

"slug": "IS1001-MC",

"description": "IS1001 Master Controller"

},

"comment": "DEMO",

"antennas": [

{

"code": "04",

"latitude": **null**,

"longitude": **null**,

"comment": "",

"active": **true**

},

{

"code": "03",

"latitude": **null**,

"longitude": **null**,

"comment": "",

"active": **true**

},

{

"code": "02",

"latitude": **null**,

"longitude": **null**,

"comment": "",

"active": **true**

},

{

"code": "01",

"latitude": **null**,

"longitude": **null**,

"comment": "",

"active": **true**

}

]

},

{

"code": "C1",

"reader\_type": {

"slug": "CSI\_PROBE",

"description": "CSI Probe Reader"

},

"comment": "",

"antennas": []

}

]

}

]

## Get Tags

Get tags (by date range):

[https://data3.biomark.com/api/v1/tags/<site>/?begin\_dt=YYYY-MM-DD&end\_dt=YYYY-MM-DD](https://data3.biomark.com/api/v1/tags/%3csite%3e/?begin_dt=YYYY-MM-DD&end_dt=YYYY-MM-DD) (GET)

Will return all tags read between the two dates, midnight to 11:59:59 pm. Example, supplying the following dates:

begin\_dt=2021-08-15

end\_dt=2021-08-16

optional: pass &test\_tags=true to return test tags with live tag detections

will return all tags for August 15th in json format. Example:

[

{

"tag": "3E7.0000001D02",

"detected\_at": "2021-08-15T23:03:03.670000",

"antenna": {

"code": "02",

"reader": {

"code": "02",

"site": {

"name": "18 Mile Creek",

"slug": "18M"

}

}

}

},

{

"tag": "3E7.0000001D01",

"detected\_at": "2021-08-15T23:01:28.710000",

"antenna": {

"code": "01",

"reader": {

"code": "01",

"site": {

"name": "18 Mile Creek",

"slug": "18M"

}

}

}

},

{

"tag": "3E7.0000001D02",

"detected\_at": "2021-08-15T22:03:03.660000",

"antenna": {

"code": "02",

"reader": {

"code": "02",

"site": {

"name": "18 Mile Creek",

"slug": "18M"

}

}

}

},

]

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## Get Reader Data

Get reader data (voltage), for date range.

[https://data3.biomark.com/api/v1/reader/<site>/?begin\_dt=2021-08-15&end\_dt=2021-08-16](https://data3.biomark.com/api/v1/reader/%3csite%3e/?begin_dt=2021-08-15&end_dt=2021-08-16)

Will return all reader data between the two dates, midnight to 11:59:59 pm. Example, supplying the following dates:

begin\_dt=2021-08-15

end\_dt=2021-08-16

will return all reader data for August 15th in json format. Example:

[

{

"parameter": {

"slug": "in\_volt",

"units": "V"

},

"reader": {

"code": "01",

"site": {

"name": "18 Mile Creek",

"slug": "18M"

}

},

"read\_at": "2021-08-15T00:01:40.570000",

"value": "24.30000"

},

{

"parameter": {

"slug": "in\_volt",

"units": "V"

},

"reader": {

"code": "01",

"site": {

"name": "18 Mile Creek",

"slug": "18M"

}

},

"read\_at": "2021-08-15T01:01:40.570000",

"value": "24.20000"

}

]

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## Get Environment Data

Get environment data if available (water\_temp, water\_level, air\_temp, etc.), for date range.

[https://data3.biomark.com/api/v1/enviro/<site>/?begin\_dt=2021-08-15&end\_dt=2021-08-16](https://data3.biomark.com/api/v1/enviro/%3csite%3e/?begin_dt=2021-08-15&end_dt=2021-08-16)

Will return all environment data between the two dates, midnight to 11:59:59 pm. Example, supplying the following dates:

begin\_dt=2021-08-15

end\_dt=2021-08-16

will return all environment data for August 15th in json format. Example:

[

{

"parameter": {

"slug": "air\_temp",

"units": "C"

},

"reader": {

"code": "A1",

"site": {

"name": "18 Mile Creek",

"slug": "18M"

}

},

"read\_at": "2021-08-16T00:19:48.440000",

"value": "6.70000"

},

{

"parameter": {

"slug": "water\_level",

"units": "M"

},

"reader": {

"code": "A1",

"site": {

"name": "18 Mile Creek",

"slug": "18M"

}

},

"read\_at": "2021-08-16T19:19:47.840000",

"value": "0.05000"

}

]

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## Get Antenna Data

Get antenna data if available (noise, current, cap), for date range.

[https://data3.biomark.com/api/v1/antenna/<site>/?begin\_dt=2021-08-15&end\_dt=2021-08-16](https://data3.biomark.com/api/v1/antenna/%3csite%3e/?begin_dt=2021-08-15&end_dt=2021-08-16)

Will return all antenna data between the two dates, midnight to 11:59:59 pm. Example, supplying the following dates:

begin\_dt=2021-08-15

end\_dt=2021-08-16

will return all antenna data for August 15th in json format.

**Note**: for noise multiply by 100 to get percentage (0.02 = 2%)

**[**

{

"parameter": {

"slug": "noise",

"units": "%"

},

"antenna": {

"code": "01",

"reader": {

"code": "01",

"site": {

"name": "18 Mile Creek",

"slug": "18M"

}

}

},

"read\_at": "2021-08-15T04:01:39.770000",

"value": "0.00000"

},

{

"parameter": {

"slug": "noise",

"units": "%"

},

"antenna": {

"code": "01",

"reader": {

"code": "01",

"site": {

"name": "18 Mile Creek",

"slug": "18M"

}

}

},

"read\_at": "2021-08-15T05:01:39.770000",

"value": "0.00000"

}

]

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# Example Code

A Node.js project is available that demonstrates calling the various API functions and can be used as a starting point for using the API. The zip file can be downloaded from the BioLogic site at:

https://data3.biomark.com/static/api-example.zip

Extract the zip file and follow the instructions in the readme file.