BriteSwitch

RebateDirect API Documentation for Retrolux

Version 3.2

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Introduction

BriteSwitch's RebateDirect api will let you integrate rebates and incentives into your tools. It uses a simple REST interface to get the data. All data should be passed as JSON objects.

All GET and POST requests will send a JSON object to the API. In all requests, you must include your BriteSwitch API key.

key = (10 digit API key)

Utility Lookup

To find a list of utilities, you will query:

https://www.briteswitch.com/rebatedirect/api/utility.php

This information is usually used to allow the user to select their utility. In many cases, more than one utility can apply to one zip code, so it is always good to allow the user to select/confirm their utility.

Send a JSON object with either of the following key pairs:

zip=>(zip code – US only)
state=>(2 letter abbreviation for state or province)

(be sure to include your BriteSwitch api key)

The address will return a JSON object with the list of utilities.

Sample code for a list of utilities based on a zip code:

```
Zip Code: <input type="text" name="zip" id="zip" onblur="zipLookup(this.value)">
<div id="utilitySelect"></div>
<script>
function zipLookup (str) {
        var obj = {
  zip: str
        };
        dbParam = JSON.stringify(obj);
        var xmlhttp = new XMLHttpRequest();
        xmlhttp.onreadystatechange = function() {
                 if (this.readyState == 4 && this.status == 200) {
                         var myObj = JSON.parse(this.responseText);
                         text = "";
                                          for (i = 0; i < myObj.length; i++)
                                                   text += "" + myObj[i] + "";
                                          text += "";
                         document.getElementById("utilitySelect").innerHTML = text;
                 }
        };
        xmlhttp.open("POST", "utility.php", true);
        xmlhttp.setRequestHeader("Content-type", "application/x-www-form-urlencoded");
        xmlhttp.send("param=" + dbParam);
        };
</script>
```

Get a list of rebates

To get a list of rebates, you will query

https://www.briteswitch.com/rebatedirect/api/rebatelist.php

This information is usually to get a list of rebates that are available. This does not calculate the rebate but provides the raw data (ie. Data will show \$0.05 per kWh saved instead of calculating it to be \$3.75 per lamp).

By default all results are returned. The results can be filtered; send a JSON object with any of the following key pairs. For multiple selections, separate with a pipe ("|")

```
ProductName=>(The name of the product, see Table 1)

Utility=>(The name of the utility)

ConstructionType=>(Retrofit, New Construction)

RebateType =>(Prescriptive, Custom, Midstream, Direct Install)

ApplicationType=>(Interior, Exterior)

Order=>(Allows custom ordering of results, include fields below you want to order. Ascending values by default; can modify with "DESC" to get descending).

Funding=>(By default, only programs with active funding are shown, to show all programs, pass "All" value)
```

The address will return a JSON multidimensional object with the following fields.

RebateProID – Unique rebate identifier, do not show to users

RebateName – The name of the rebate

RebateAmount – The dollar amount of a rebate

AmountPer – Describes the rebate amount unit (ie, lamp, kWh saved, kW saved, etc)

ApplicationID – If the rebate program has a specific application # for this rebate

Details – General details of the rebate in plain English. URL encoded field, must be decoded ("decodeURIComponent(details.replace(/\+/g, ' '));")

RebateType – Prescriptive, Custom, Midstream or Direct Install

CertificationList – If the program requires DLC or EnergyStar

WebAddress – The link to the paperwork

ApplicationType – Interior or Exterior Application

EndDate – Date the rebate program is scheduled to change

LastChecked – The date that BriteSwitch last checked the program

CostCap – If the rebate is capped at a % of cost. Will be in decimal form (between 0 and 1)

CostCapType – The type of cost cap (material cost or project cost)

ConstructionType – New Construction or Retrofit

ProgramName – The name of the rebate program

Utility – The name of the utility

ProductName – The product the rebate applies to

Restrictions – A serialized array that provides a rebate's restrictions. Used to further restrict shown rebates based on wattage, lumens, etc.

RestrictionsText –The restrictions field converted to plain text and sentences.

Get a list of programs

To get a list of rebates, you will query

https://www.briteswitch.com/rebatedirect/api/programlist.php

By default all results are returned. The results can be filtered; send a JSON object with any of the following key pairs. For multiple selections, separate with a pipe ("|")

Utility=>(The name of the utility)

Funding=>(By default, only programs with active funding are shown, to show all programs, pass "All" value)

Order=>(Allows custom ordering of results, include fields below you want to order. Ascending values by default; can modify with "DESC" to get descending).

The address will return a JSON multidimensional object with the following fields.

ProgramName – The name of the program
OutOfFundsHistory – The history of the program's funding
OutOfFundsNotes – Notes about the programs that are out of funding
ExternalNotes – Program notes

OutOfFunds – 0 = has funding, 1 = out of funding

Get a list of products with rebates

To get a list of products with rebates, you will query

https://www.briteswitch.com/rebatedirect/api/productlist.php

By default, all unique results are returned. The results can be filtered; send a JSON object with any of the following key pairs. For multiple selections, separate with a pipe ("|")

Utility=>(The name of the utility)

ConstructionType=>(Retrofit, New Construction)

RebateType =>(Prescriptive, Custom, Midstream, Direct Install)

ApplicationType=>(Interior, Exterior)

Order=>(Allows custom ordering of results, include fields below you want to order. Ascending values by default; can modify with "DESC" to get descending).

The address will return a JSON multidimensional object with the following fields.

ProductName- Unique product names

WebApp is Iframe for complete control, bootstrap base to see responsive to size Widget is embedded, use defensive CSS to format

Get a list of States or Provinces

To get a list a list of States or Provinces to populate a select box, you post to

https://www.briteswitch.com/rebatedirect/api/statelist.php

By default all results are returned. The results can be filtered; send a JSON object with any of the following key pairs. For multiple selections, separate with a pipe ("|")

Country=>(The country, by default returns US only)

Order=>(Allows custom ordering of results, include fields below you want to order. Ascending values by default; can modify with "DESC" to get descending).

The address will return a JSON multidimensional object with the following fields.

State – 2 letter abbreviation of State / Province StateName – Full name of State / Province. This should not be used as the value in a drop down Country – "US" or "Canada"

Get a list of cities in a utility

To get a list a list of cities that are covered by a utility, you post to

https://www.briteswitch.com/rebatedirect/api/citylist.php

By default all results are returned. The results can be filtered; send a JSON object with any of the following key pairs. For multiple selections, separate with a pipe ("|")

Utility=>(The name of the utility)

The address will return a JSON multidimensional object with the following fields.

City – The full name of the city
State – 2 letter abbreviation of State / Province
ZIPCode – The zip code of the city

Get the energy rate

To get the average energy rate for a state, you post to

https://www.briteswitch.com/rebatedirect/api/energyrate.php

By default all results are returned. The results can be filtered; send a JSON object with any of the following key pairs.

State=>(2 letter abbreviation of State or Province)
ZIPCode=>(5 digit Zip Code, US only)

The address will return a JSON multidimensional object with the following fields.

State – 2 letter abbreviation of State / Province StateName – Full name of State / Province. This should never be used as the value ElectricRate – The average kWh for commercial customers according to the DOE

See if a location may have rebates

To see if a specific location may have rebate potential, post to

https://www.briteswitch.com/rebatedirect/api/rebateavailable.php

This resource look to see if rebates may be available based on the location and product type but does not go further into detail. This is used when having a questionnaire to be filled out for a manual rebate analysis or as a qualifier before moving forward in the rebate process.

To execute, send a JSON object with any of the following key pairs. For multiple selections, separate with a pipe ("|")

ProductName=>(The name of the product, see Table 1)
Utility=>(The name of the utility)

CurrentFunding=>(Put "TRUE" if you want only programs with current funding, if excluded, returns all programs)

The address will return a JSON object with the following fields.

RebateAvailable—Returns "Yes" or "No" as to rebates may be available
CapacityIncentiveAvailable—Returns "Yes" or "No" as to whether capacity incentive may be available

Calculate a rebate

To calculate the potential rebate of a product, you query the following resource:

https://www.briteswitch.com/rebatedirect/api/calculaterebate.php

Send a JSON object with the following key pairs. For multiple selections, separate with a pipe ("|"). None of these are required fields, the most data you can send over, the more accurate the rebate estimate will be. It will send over all rebates that apply. Can use that data to let the user choose which rebate is correct, show a range of possible rebates, or use the lowest rebate amount.

ProductName=>(The name of the product, see Table 1)

Utility=>(The name of the utility, name must match our format)

ConstructionType=>(Retrofit, New Construction)

ExistingWatts=>(Nominal watts of the existing lighting)

ExistingSystemWatts=>(System watts of the existing lighting, optional but highly recommended)

ExistingLamps=>(Number of lamps in the existing fixture)

ProposedLamps=>(Number of lamps in the proposed fixture)

ProposedWatts=>(Nominal watts of the new lighting)

ProposedSystemWatts=>(Nominal watts of the new lighting, used when running rebates per

fixture, it's the lamp wattage times number of lamps)

Hours=>(Annual operating hours)

MaterialCost=>(The estimated cost of the material. Required to take into account cost caps)

LaborCost=>(The estimated cost to install the new lighting. Optional)

RebateType =>(Prescriptive, Custom, Midstream, Direct Install)

ApplicationType=>(Interior, Exterior)

Lumens=>(The reported lumens of the proposed lighting solution)

Order=>(Allows custom ordering of results, include fields below you want to order. Ascending values by default; can modify with "DESC" to get descending).

RebateProID=>(Used if you need to query what a rebate would be from one specific program.

Use when a user manually narrows down rebate)

kWhsavings=>(True if you would like to get the kWh savings)

EnergySavings=>(Pass the energy rate in order to calculate the Energy Savings)

Payback=>(True if you would like to get the payback of a measure)

Quantity=>(Specifies the quantities of a measure, 1 if not specified.)

CapacityIncentive=>(To calculate a capacity incentive, set to TRUE, if you know the coefficient factor, include it here, otherwise the average will be used)

The address will return a JSON multidimensional object with the following fields.

EstimatedRebate -

Payback -

EnergySavings –

RebateName – The name of the rebate

RebateAmount – The dollar amount of a rebate

AmountPer – Describes the rebate amount unit (ie, lamp, kWh saved, kW saved, etc)

ApplicationID – If the rebate program has a specific application # for this rebate

Details – General details of the rebate in plain English. URL encoded field, must be decoded ("decodeURIComponent(details.replace($/\+/g$, ''));")

RebateType – Prescriptive, Custom, Midstream or Direct Install

CertificationList – If the program requires DLC or EnergyStar

WebAddress – The link to the paperwork

ApplicationType – Interior or Exterior Application

EndDate – Date the rebate program is scheduled to change

LastChecked – The date that BriteSwitch last checked the program

CostCap – If the rebate is capped at a % of cost. Will be in decimal form (between 0 and 1)

CostCapType – The type of cost cap (material cost or project cost)

ConstructionType – New Construction or Retrofit

ProgramName – The name of the rebate program

Utility - The name of the utility

ProductName – The product the rebate applies to

Restrictions – A serialized array that provides a rebate's restrictions. Used to further restrict shown rebates based on wattage, lumens, etc.

RestrictionsText –The restrictions field converted to plain text and sentences.

SystemNote – If there are no rebates or a custom rebates, this field is passed.

AnnualkWhSavings – how many kWh are saved

AnnualEnergySavings – The estimated annual energy savings

CapacityIncentive – The estimated capacity incentive per fixture

NetRebate – The estimated net rebate (taking into account quantities)

TotalIncentive – The net rebate plus capacity incentive.

BriteSwitchListed – If BriteSwitch is able to get the midstream, 0 for no, 1 for yes

Calculate a rebate for a project

This function will allow you to estimate the rebate for a variety of items (or a whole shopping cart/project) at once. It is designed for minimal user input so it gives a general, estimated rebate rather than an exact number. If the tool can't narrow down the applicable rebate to 1 possibility, it will use the

lowest amount for a conservative estimate. If you want a more accurate response, use the calculate rebate function once for each item in a cart instead.

To calculate the potential rebate of a project, you query the following resource:

https://www.briteswitch.com/rebatedirect/api/calculateproject.php

Send a URL-encoded JSON object with the following key pairs. For multiple selections, separate with a pipe ("|")

ProductName=>(The name of the product, see Table 1)

Utility=>(The name of the utility)

ConstructionType=>(Retrofit, New Construction)

ExistingWatts=>(Nominal watts of the existing lighting)

ProposedWatts=>(Nominal watts of the new lighting)

Hours=>(Annual operating hours)

MaterialCost=>(The estimated cost of the material. Required to take into account cost caps)

LaborCost=>(The estimated cost to install the new lighting. Optional)

RebateType =>(Prescriptive, Custom, Midstream, Direct Install)

ApplicationType=>(Interior, Exterior)

Order=>(Allows custom ordering of results, include fields below you want to order. Ascending values by default; can modify with "DESC" to get descending).

RebateProID=>(Used if you need to query what a rebate would be from one specific program.

Use when a user manually narrows down rebate)

kWhsavings=>(True if you would like to get the kWh savings)

EnergySavings=>(True if you would like to get the annual energy savings, uses the default state rate unless otherwise specified)

Payback=>(True if you would like to get the payback of a measure)

Quantity=>(Specifies the quantities of a measure, 1 if not specified.)

The address will return a JSON multidimensional object with the following fields.

EstimatedRebate -

Payback -

EnergySavings -

Notes – Only returned if a rebate could not be automatically calculated. Response would be "Rebates couldn't be automatically calculated, contact BriteSwitch for estimate"

Sample request:

{"key":"7327445477","Utility":"PSE&G - Public Service Elec & Gas Co -

NJ", "Hours": "3000", "Cart": [{"ExistingWatts": 34, "ProposeWatts": 30, "MaterialCost": 42.97, "Quantity": 72, "ProductName": "2x2 Luminaires for Ambient Lighting of Interior Commercial

Spaces"},{"ExistingWatts":55,"ProposeWatts":30,"MaterialCost":49.97,"Quantity":10,"ProductName":"2 x4 Luminaires for Ambient Lighting of Interior Commercial Spaces"}]}

Table 1

Product Type

RebateDirect uses the ProductType field to limit and search for rebates. These fields are based on the DLC or EnergyStar categories but may vary slightly from their official names. The product types below must be used when searching for rebates for a product.

1x4 Linear Retrofit Kits 1x4 Integrated Retrofit Kits 2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces 2x2 Linear Retrofit Kits 2x2 Integrated Retrofit Kits 2x4 Luminaires for Ambient Lighting of Interior Commercial Spaces 2x4 Linear Retrofit Kits 2x4 Integrated Retrofit Kits Retrofit Kits for Direct Linear Ambient Luminaires 2' LED Tube T8 - Type A 2' LED Tube T8 - Type A/B 2' LED Tube T8 - Type B 2' LED Tube T8 - Type C 3' LED Tube T8 - Type A 3' LED Tube T8 - Type A/B 3' LED Tube T8 - Type B 3' LED Tube T8 - Type C 4' LED Tube T5 - Type A 4' LED Tube T5 - Type A/B 4' LED Tube T5 - Type B 4' LED Tube T5 - Type C 4' LED Tube T8 - Type A 4' LED Tube T8 - Type A/B 4' LED Tube T8 - Type B

1x4 Luminaires for Ambient Lighting of Interior Commercial Spaces

8' LED Tube T8 - Type A 8' LED Tube T8 - Type A/B

4' LED Tube T8 - Type C

4' LED Tube T8 U-bend - Type A 4' LED Tube T8 U-bend - Type A/B 4' LED Tube T8 U-bend - Type B 4' LED Tube T8 U-bend - Type C

- 8' LED Tube T8 Type B
- 8' LED Tube T8 Type C

Ceramic HID

CFLi

CFL-ni

Cold Cathode

Dimming System

High Pressure Sodium

High-Low System

Induction

Integrated CDM

LED

LED A-Shape Lamp

LED Channel Sign

LED Deco Lamp

LED Downlight

LED Exit Sign

LED Flood Light

LED Freezer Light

LED Globe Lamp

LED High-bay

LED Horticulture

LED Linear Ambient Luminaires

LED Low-bay

LED MR Lamp

LED PAR/R Lamp

LED Parking Garage/Canopy

LED Pedestrian Signal

LED Pin-based

LED Retrofit Kits

LED Track Light

LED Traffic Signal

Light Tube

Medium Screw-Base for HID Lamps - Type A

Medium Screw-Base for HID Lamps - Type B

Medium Screw-Base for HID Lamps - Type C

Metal Halide

Mogul Screw-Base for HID Lamps - Type A

Mogul Screw-Base for HID Lamps - Type B

Mogul Screw-Base for HID Lamps - Type C

Outdoor Pole/Arm-Mounted Luminaires

Outdoor Wall-Mounted Area Luminaires

Pulse Start Metal Halide

T5

T5HO

T8

T8 U-bend

T8H0

T8VHO

Daylighting Dimming System

Fixture Mount Occupancy Sensor

Lighting Control System

Networked Lighting Controls

Photocells

Plug load occupancy sensor

Remote Mount Occupancy Sensor Time Clock Wall Mount Occupancy Sensor Fixture removal