

# Command and Control API Guide for Remote IoT Appliances

This guide describes the HTTP-based API for commanding and controlling remote IoT Appliances.

## Base URL

```
https://api.example.com/v1/
```

## Authentication

All endpoints require an `Authorization: Bearer <token>` header.

## Endpoints

### List Appliances

```
GET /devices
```

#### Query Param

##### Type

##### Description

`status` string Filter by status (e.g. `online`, `offline`)

#### Response Sample

```
{
  "devices": [
    {
      "id": "abc123",
      "name": "Living Room Plug",
      "type": "plug",
      "status": "online"
    }
  ]
}
```

### Get Appliance Status

```
GET /devices/<id>/status
```

#### Response Sample

```
{  
  "id": "abc123",  
  "power": "on",  
  "temperature": 24.3  
}
```

## Send Command to Appliance

POST /devices/<id>/commands

### Body Field

#### Type

#### Description

command string Command type (e.g. `power_on`, `power_off`)

params object (optional) Additional parameters for the command

### Request Sample

```
{  
  "command": "set_temperature",  
  "params": { "value": 21 }  
}
```

### Response Sample

```
{  
  "success": true,  
  "message": "Command queued"  
}
```

## Get Command History

GET /devices/<id>/commands

### Response Sample

```
{  
  "history": [  
    {  
      "timestamp": "2024-06-15T12:45:00Z",  
      "command": "power_on",  
      "status": "executed"  
    }  
  ]  
}
```

## Common Response Codes

- 200 â€“ Success
- 400 â€“ Bad request
- 401 â€“ Unauthorized

- 404 “Not found
- 500 “Server error