

# API Rate Limiting & Throttling Specification

## Overview

This document describes the rules and expected behavior around rate limiting and throttling for consuming the Example API.

## Definitions

- **Rate Limiting:** Restricting the number of API requests a client can make in a given timeframe.
- **Throttling:** Delaying or denying API requests once rate limits are exceeded.

## Limits

Plan	Limit	Time Window	Scope
Free	60 requests	per minute	per API key
Pro	600 requests	per minute	per API key
Enterprise	Custom	per minute	per API key

## Headers

Header	Description
X-RateLimit-Limit	Maximum number of requests allowed in the current time window.
X-RateLimit-Remaining	Remaining requests in the current window.
X-RateLimit-Reset	Timestamp (UTC) when the rate limit resets.

## Behavior

- Once the limit is reached, subsequent requests receive `HTTP 429 Too Many Requests`.
- Clients should use `X-RateLimit-Reset` to determine when to retry.
- No partial credits are carried over to the next window.

## Sample Response

```
HTTP/1.1 429 Too Many Requests
Content-Type: application/json
X-RateLimit-Limit: 60
X-RateLimit-Remaining: 0
X-RateLimit-Reset: 1719981600
{
  "error": "Rate limit exceeded. Try again later."
}
```

## Best Practices

- Use appropriate API keys for each application instance.
- Monitor returned rate limit headers and back off accordingly.
- If you require higher limits, contact support for an upgrade.

