

# Deployment Guide - TikTok Video Downloader

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This guide covers deploying the TikTok Video Downloader to various platforms, with special focus on Vercel deployment.

## Vercel Deployment (Recommended)

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This project has been specifically optimized for Vercel deployment with all dependency conflicts resolved.

### Prerequisites

- GitHub account
- Vercel account (free tier available)
- Node.js 18+ locally (for testing)

### Step 1: Prepare Your Repository

#### 1. Ensure the project builds locally:

```
bash
cd /path/to/video_downloader_website/app
npm install --legacy-peer-deps
npm run build
```

#### 2. Push to GitHub:

```
bash
git init
git add .
git commit -m "Initial commit - Vercel ready"
git remote add origin https://github.com/yourusername/tiktok-downloader.git
git push -u origin main
```

### Step 2: Deploy to Vercel

#### 1. Connect to Vercel:

- Go to [vercel.com](https://vercel.com) (<https://vercel.com>)
- Sign in with your GitHub account
- Click "New Project"
- Import your repository

#### 2. Configure Build Settings:

- Framework Preset: **Next.js**
- Root Directory: **app** (important!)
- Build Command: `npm run build`
- Output Directory: `.next`
- Install Command: `npm install --legacy-peer-deps`

#### 3. Environment Variables:

Add these in the Vercel dashboard:

```
NEXT_PUBLIC_DOMAIN=https://your-app.vercel.app
NEXT_PUBLIC_GA_TRACKING_ID=G-XXXXXXXXXX
NEXT_PUBLIC_ADSENSE_CLIENT_ID=ca-pub-XXXXXXXXXX
```

#### 4. Deploy:

- Click "Deploy"
- Wait for the build to complete (should succeed without errors)
- Your app will be live at `https://your-app.vercel.app`

### Step 3: Verify Deployment

Test these URLs after deployment:

- `https://your-app.vercel.app` - Main page
- `https://your-app.vercel.app/api/download` - API endpoint
- `https://your-app.vercel.app/sitemap.xml` - SEO sitemap
- `https://your-app.vercel.app/robots.txt` - Robots file

## Build Configuration Details

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This project includes several optimizations for successful deployment:

### Package.json Optimizations

- Compatible dependency versions
- Proper Next.js 14 configuration
- Legacy peer deps support for complex dependencies

### Vercel.json Configuration

```
{
  "version": 2,
  "buildCommand": "npm run build",
  "outputDirectory": ".next",
  "installCommand": "npm install --legacy-peer-deps",
  "framework": "nextjs"
}
```

### Fixed Issues

- Framer Motion version compatibility
- Dependency conflicts resolved
- TypeScript compilation errors fixed
- Build process optimized
- API routes properly configured

## Post-Deployment Checklist

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### 1. Functionality Testing

- ☐ Homepage loads without errors
- ☐ Video download form is functional
- ☐ API endpoint `/api/download` responds correctly
- ☐ Mobile responsiveness works
- ☐ All animations and interactions work

### 2. Performance Verification

- ☐ Page load speed < 3 seconds

- [ ] Core Web Vitals are good
- [ ] Images load properly
- [ ] No console errors

## Troubleshooting

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### Common Build Issues

#### 1. Dependency Conflicts:

```
bash
# Solution: Use legacy peer deps
npm install --legacy-peer-deps
```

#### 2. Build Failures:

```
bash
# Clean build
rm -rf .next node_modules
npm install --legacy-peer-deps
npm run build
```

### Runtime Issues

#### 1. 404 Errors:

- Verify the root directory is set to `app` in deployment settings
- Check that all files are properly committed to Git

#### 2. API Errors:

- Verify environment variables are set
- Check API route file structure

## Success!

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Once deployed successfully, your TikTok Video Downloader will be:

- Live and accessible worldwide
- Optimized for performance
- SEO-friendly
- Mobile responsive
- Ready for monetization

Your deployment is now complete and ready for users!