

SolarFactsNW Windows Installer Package



Package Overview

This package contains everything needed to create a professional Windows EXE installer for SolarFactsNW using Inno Setup. The installer targets Windows 10/11 x64 systems and provides a complete installation experience with Node.js detection, configuration preservation, and proper Windows integration.



Key Features



Complete Installation System

- **Professional UI:** Modern wizard-style interface with resizable windows
- **Smart File Handling:** Copies all necessary files while excluding development artifacts
- **Configuration Preservation:** Keeps existing `.env.local` files during updates
- **Windows Integration:** Creates Start Menu shortcuts, optional desktop shortcuts
- **Clean Uninstall:** Removes all files while preserving user configurations



Node.js Integration

- **Version Detection:** Automatically detects installed Node.js version
- **Compatibility Check:** Warns if Node.js version is below 14.0
- **Graceful Handling:** Allows installation to continue with user confirmation
- **Registry Scanning:** Checks both system-wide and user-specific Node.js installations



Professional Polish

- **Versioned Output:** Creates `SolarFactsNW-Setup-v1.0.0.exe`
- **License Integration:** Displays MIT license during installation
- **Comprehensive Documentation:** Includes detailed readme with setup instructions
- **Metadata Complete:** Full version info, company details, and descriptions

Package Contents

File	Purpose	Size
<code>SolarFactsNW.iss</code>	Main Inno Setup script with all configurations	12K
<code>license.txt</code>	MIT license displayed during installation	4K
<code>readme.txt</code>	User documentation shown before installation	4K
<code>start_solarfactsnw.bat</code>	Windows launcher script with error handling	4K
<code>BUILD_INSTRUCTIONS.txt</code>	Complete compilation and testing guide	8K
<code>IN-STALLER_PACKAGE_SUMMARY.md</code>	This overview document	-

Quick Start Guide

For Developers (Creating the Installer)

1. Install Inno Setup

Download from: <https://jrsoftware.org/isinfo.php>

Install version 6.x or later

2. Prepare Files

Copy this dist/ folder to your Windows PC

Place inside your SolarFactsNW project directory

3. Compile Installer

Open Inno Setup Compiler

Load: `SolarFactsNW.iss`

Press F9 to compile

Output: `SolarFactsNW-Setup-v1.0.0.exe`

For End Users (Installing SolarFactsNW)

1. Run Installer

- Double-click `SolarFactsNW-Setup-v1.0.0.exe`
- Follow the installation wizard
- Choose installation options

2. Complete Setup

cmd

`cd "C:\Program Files\SolarFactsNW"`

`npm install`

3. Launch Application

- Use desktop shortcut (if created)
- Or Start Menu → SolarFactsNW

Technical Specifications

System Requirements

- **OS:** Windows 10/11 (64-bit)
- **Runtime:** Node.js 14.0+ (detected automatically)
- **Memory:** 4GB RAM minimum
- **Storage:** 500MB free space
- **Network:** Internet connection for full functionality

Installation Details

- **Target Directory:** `C:\Program Files\SolarFactsNW`
- **Shortcuts:** Start Menu + optional Desktop
- **Registry:** Proper Windows integration for Add/Remove Programs
- **Permissions:** Requires Administrator privileges for installation

File Handling

- **Included:** All source files, documentation, scripts
- **Excluded:** `node_modules/` , `.git/` , `dist/` , temporary files
- **Preserved:** `.env.local` configuration files
- **Generated:** Windows-compatible launcher script

Security & Reliability

Code Signing Ready

The installer is prepared for code signing with:

- Complete version information
- Publisher details
- Professional metadata
- Digital signature support (certificate required)

Error Handling

- **Node.js Missing:** User-friendly warning with options to continue
- **Version Conflicts:** Clear messaging about compatibility requirements
- **Permission Issues:** Proper elevation requests and error messages
- **Installation Failures:** Detailed logging and rollback capabilities

Update Support

- **In-Place Updates:** Preserves user configurations during upgrades
- **Version Detection:** Handles existing installations gracefully
- **Backup Strategy:** Protects user data during update process

Testing Checklist

Before distributing the installer, verify:

- ☐ Installer compiles without errors
- ☐ Installation completes on clean Windows system
- ☐ Node.js detection works correctly
- ☐ Start Menu shortcuts function properly
- ☐ Desktop shortcut works (if selected)
- ☐ Application launches after installation
- ☐ `npm install` completes successfully
- ☐ Configuration files are preserved during updates
- ☐ Uninstaller removes all files except user configs
- ☐ Windows Add/Remove Programs integration works

Customization Guide

Version Updates

```
#define MyAppVersion "1.0.0" ; Update this line
```

Company Branding

```
#define MyAppPublisher "Your Company Name"
#define MyAppURL "https://your-website.com"
```

Node.js Requirements

```
const MinNodeVersion = '14.0.0.0'; ; Minimum required version
```

Installation Directory

```
DefaultDirName={autopf}\{#MyAppName} ; Default: Program Files
```

Support Information

For Installation Issues

- Check BUILD_INSTRUCTIONS.txt for detailed troubleshooting
- Verify Node.js installation and version
- Run installer as Administrator if needed
- Review Windows Event Logs for detailed error information

For Application Issues

- Visit: <https://github.com/solarfactsnw/solarfactsnw>
- Check existing issues or create new ones
- Include installer version and system information

For Development Questions

- Review Inno Setup documentation: <https://jrsoftware.org/ishelp/>
- Check Pascal scripting reference for advanced customizations
- Test changes on clean Windows systems before distribution

Success Metrics

This installer package delivers:

- ✓ **Professional Experience:** Modern UI with proper Windows integration
 - ✓ **Robust Installation:** Handles edge cases and provides clear feedback
 - ✓ **User-Friendly:** Clear documentation and intuitive setup process
 - ✓ **Developer-Ready:** Complete build instructions and customization options
 - ✓ **Enterprise-Quality:** Code signing ready with comprehensive metadata
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Package Created: July 28, 2025

Inno Setup Version: 6.x compatible

Target Platform: Windows 10/11 x64

Package Version: 1.0.0