# **SIEMENS**

产品信息

Product Information 04/2018

# SINAMICS G120 智能连接模块(选件) SINAMICS G120 Smart Access (option)

模块支持的变频器固件版本至少为 4.7 SP6。有关模块详情,参见《SINAMICS G120 智能连接模块操作说明》。

The supported inverter firmware version must be 4.7 SP6 or later. For more information about the module, see *SINAMICS G120 Smart Access Operating Instructions*.

### SINAMICS G120 智能连接模块 SINAMICS G120 Smart Access



## 功能 Functionality

SINAMICS G120 智能连接模块是一款基于 Wi-Fi 的网络服务器模块和工程工具。可允许从所连设备(带无线网卡的传统 PC、平板电脑或智能手机)对支持的 SINAMICS G120 变频器进行基于网络的访问,实现快速调试、参数设置、JOG、监控、诊断、备份与恢复等变频器操作。SINAMICS G120 智能连接模块仅供调试使用,不可长期与变频器共用。

SINAMICS G120 Smart Access is a Wi-Fi-based Web server module and an engineering tool. It allows web-based access to the supported SINAMICS G120 inverter from a connected device (a conventional PC with a wireless network adapter installed, a tablet, or a smart phone), realizing inverter operations such as quick commissioning, parameterization, JOG, monitoring, diagnostics, backup and restoring. SINAMICS G120 Smart Access is only for commissioning and thus cannot be used with the inverter permanently.

# 连接设备 Connecting the device

SINAMICS G120 智能连接模块 SINAMICS G120 Smart Access	带无线网卡的设备 Device with wireless network adapter	操作系统 Operating system	推荐使用的网络浏览器 *) Recommended Web browser
	PC	Windows 7	• ≥ Google Chrome 64.0.3239 • ≥ IE 11.0.9600
		Windows 10	• ≥ Edge 38.14393.1066
	智能手机/平板电脑 Smart phone/tablet	≥ Apple iOS 10.2	• ≥ Firefox 10.6 • Safari
		≥ Android 6.0.1	• ≥ Google Chrome 64.0.3202.84 • ≥ Firefox 58.0.2

<sup>\*)</sup> 为了保证最佳网络浏览性能,西门子推荐使用以上浏览器进行操作。

Siemens recommends that you use the Web browsers listed above to achieve optimum Web browsing performance.

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### LED 状态 LED Status

LED	颜色 Color	描述 Description	
变频器通信	红色长亮	模块与变频器未建立通信。	
Inverter	Solid red	The communication between the module and the inverter is not	
communication		established.	
	绿色长亮	模块与变频器已建立通信。	
	Solid green	The communication between the module and the inverter is	
		established.	
Wi-Fi 通信	红色长亮	网络通信正在初始化。	
Wi-Fi	Solid red	The network communication is initializing.	
communication	黄色长亮	网络初始化已完成但模块尚未连接到 PC 或移动设备。 The network initialization completes but the module is not	
	Solid yellow		
		connected to a PC or mobile device.	
	绿色长亮	模块与 PC 或移动设备已建立连接,现在可以打开网页。	
	Solid green	The connection between the module and the PC or mobile device	
		is set up and you can open the Web pages now.	
	绿色闪烁	模块与 PC 或移动设备已建立连接, 网页已打开。	
	Flashing green	The connection between the module and the PC or mobile device	
		is set up and the Web page is open.	
	黄色闪烁	模块因升级完成或 Wi-Fi 配置修改而需要重启。	
Flashing yellow The m		The module requires a restart because an upgrade completes or	
		the Wi-Fi configuration is modified.	
	红黄交替闪烁	模块正在升级。	
	Alternating flashing	The module is upgrading.	
	red and yellow		

# 技术规格 Technical specifications

额定电压 Rated voltage	15 V DC	
无线技术和工作频率 Wireless technology and working frequency	Wi-Fi 2400 MHz 2483.5 MHz	
最大射频功率 Maximum radio frequency power	17 dBm (EIRP *)	
无线调制制式 Wireless modulation type	802.11 b/g	
天线增益 Antenna gain	1.9 dBi	
极限工作温度范围 Extreme temperature range	-10 °C 60 °C	

<sup>\*)</sup> EIRP 表示等效全向辐射功率。EIRP means effective isotropic radiated power.

### SINAMICS G120 网址 SINAMICS G120 Web address

- http://192.168.1.1
- https://192.168.1.1 (需下载和安装 SSL 证书 requires download and installation of SSL certificates)

# 安装 SSL 证书(仅适用于 https:// 访问) Installing SSL certificates (https:// access only)

若要从基于 Windows 10 的 PC 或基于 iOS 的移动设备使用 https:// 访问 SINAMICS G120 网页,需要安装 SSL 证书。

To access the SINAMICS G120 Web pages with https:// from Windows 10-based PCs or iOS-based mobile devices, you need to install SSL certificates.

#### • 在基于 Windows 10 的 PC 上安装 Installing on Windows 10-based PCs

1. 进入证书下载网站(https://support.industry.siemens.com/cs/ww/en/ps/13225),下载文件"G120 smart access certificates.zip"。解压证书文件"root-ca-cert.der"至本地驱动。

Enter the certificate download Web site (https://support.industry.siemens.com/cs/ww/en/ps/13225) and download the file "G120 smart access certificates.zip". Extract the certificate file "root-ca-cert.der" to your local drive.

- 2. 双击文件 "root-ca-cert.der",选择 "安装证书 > 下一步"打开证书存储。
  - Double-click the file "root-ca-cert.der" and then select "Install certificate > Next" to open the certificate store.
- 3. 选择"将所有的证书都放入下列存储",并浏览到"受信任的根证书颁发机构"。
  Select "Places all certificates in the following store" and then browse to "Trusted Root Certification Authorities".
- 4. 选择"下一步>完成>确定"完成证书安装。现在您可以通过 SINAMICS G120 智能连接模块访问 SINAMICS G120 网页。
  - Select "Next > Finish > OK " to complete the certificate installation. Now you are able to access the SINAMICS G120 Web pages via the SINAMICS G120 Smart Access.

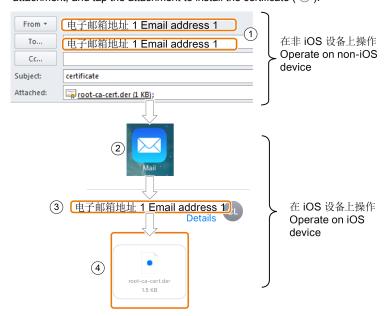
#### • 在基于 iOS 的移动设备上安装 Installing on iOS-based mobile devices

1. 由于 iOS 设备不支持直接下载文件,使用非 iOS 设备(比如 PC)进入证书下载网站 (https://support.industry.siemens.com/cs/ww/en/ps/13225),下载文件"G120 smart access certificates.zip"。解压证书文件"root-ca-cert.der"至非 iOS 设备的本地驱动。

As iOS devices do not support directly downloading files, enter the certificate download Web site (https://support.industry.siemens.com/cs/ww/en/ps/13225) from a non-iOS device (for example, a PC) and download the file "G120 smart access certificates.zip". Extract the certificate file "root-ca-cert.der" to your local drive of this non-iOS device.

2. 将证书文件以附件形式发送到个人电子邮箱账户("①")。使用 iOS 设备的内置邮箱应用("②")登录你的邮箱("③"),接收附件,并点击附件安装证书文件("④")。

Send the attached certificate file to an E-mail account of your choice ("①"). Use the built-in mail application ("②") of your iOS-based mobile device to log in to your E-mail account ("③"), receive the attachment, and tap the attachment to install the certificate ("④").



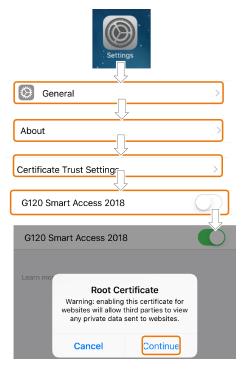
3. 在基于 iOS 的移动设备上,选择"设置>通用>描述文件"查看配置描述文件,以确保证书已签发给"G120 Smart Access 2018"。

Select "Settings > General > Profiles" to view configuration profiles in your iOS-based mobile device and make sure that the certificate has been issued to "G120 Smart Access 2018".



4. 选择"设置>通用>关于本机>证书信任设置",开启对根证书"G120 Smart Access 2018"的全面信任。现在您可以通过 SINAMICS G120 智能连接模块访问 SINAMICS G120 网页。

Select "Settings > General > About > Certificate Trust Settings" to enable full trust for the root certificate "G120 Smart Access 2018". Now you are able to access the SINAMICS G120 Web pages via the SINAMICS G120 Smart Access.



### 建立首次无线网络连接 Establishing initial wireless network connection

1. SINAMICS G120 智能连接模块安装到变频器后,给变频器通电,然后按下 WLAN 按钮 (>3 秒) 开启模块的 Wi-Fi 连接。

After you have fitted the SINAMICS G120 Smart Access to the inverter, power on the inverter and then hold down the WLAN button (> 3 s) to enable the Wi-Fi connection of the module.

- 2. 启用 PC 或移动设备内的 Wi-Fi 接口。如需在 PC 上建立无线网络连接,须确保自动 IP 设置已启用。
- Activate the Wi-Fi interface inside your PC or mobile device. If you desire to establish the wireless network connection on your PC, make sure that you have previously enabled the automatic IP settings.
- 3. 搜索 SINAMICS G120 智能连接模块的无线网络 SSID: G120 smart access\_xxxxxx ("xxxxxx" 代表 SINAMICS G120 智能连接模块 MAC 地址的末尾六个字符)。

Search the wireless network SSID of the SINAMICS G120 Smart Access: G120 smart access\_xxxxxx ("xxxxxx" stands for the last six characters of the module MAC address of the SINAMICS G120 Smart Access).

- 4. 输入无线网络密码启动连接(默认密码: 12345678)。
- Enter the wireless network password to launch the connection (default password: 12345678).
- 5. 在支持的浏览器中输入 IP 地址: (http://192.168.1.1 或 https://192.168.1.1)。

Enter the IP address (http://192.168.1.1 or https://192.168.1.1) in the supported browser.

#### 说明 Note

首次连接到无线网络后,网络浏览器打开 SINAMICS G120 网页可能需要较长时间。

After the establishment of the initial wireless network connection, it may take some time for the Web browser to open the SINAMICS G120 Web page.

#### 说明 Note

使用 https:// 访问 SINAMICS G120 网页时,若提示"因为设备的操作系统不信任该安全证书,连接不是私有的",可忽略该信息并继续访问网页。

When you use https:// to access the SINAMICS G120 Web page, if you see an error message prompting that your connection is not private because the security certificate is not trusted by your device's operating system, ignore it and proceed with the Web page access.

#### 说明 Note

在 Windows 10 上使用 https:// 打开 SINAMICS G120 网页后,若显示"证书错误",可忽略该信息并继续访问网页。

After opening the SINAMICS G120 Web page with https:// in Windows 10, if you see the message "certificate error", ignore it and proceed with the Web page access.

6. 更改密码的网页打开后,输入新密码。新密码最低要求为 8 到 9 个字符,包括数字、大写和小写字母的组合。为获得更高的网络访问安全性,输入一个 10 到 12 个字符的新密码(所允许的字符长度: 8 到 12 个字符),密码需包含以下四类字符: 1)数字: 0...9; 2)大写字母: A...Z; 3)小写字母: a...z; 4)特殊字符: \_、-、~、!、@、#、\$、%、^、&、\*,不可使用空格。

After the Web page for password change opens, enter a new password. The minimum requirement for the new password is 8 to 9 characters including numbers, uppercase and lowercase letters. To achieve better network access security, enter a new password of 10 to 12 characters (required character length: 8 to 12) that includes all of the following four categories of password characters: 1) numbers: 0 ... 9; 2) uppercase letters: A ... Z; 3) lowercase letters: a ... z; 4) special characters: \_, -, ~, !, @, #, \$, %, ^, &, and \*; the space character is not allowed.

注意,该密码更改页包含一个安全级别指示器。指示器会根据新密码的复杂程度给出如下提示:

- 低:密码长度为8到9个字符,包括数字、大写和小写字母的组合。
- 中:密码长度为 10 到 12 个字符,包括数字、大写和小写字母的组合。或者密码长度为 8 到 9 个字符,同时包括数字、大写和小写字母以及特殊字符的组合。
- 高:密码长度为 10 到 12 个字符,包括数字、大写和小写字母以及特殊字符的组合。

Note that this password change page includes a security level indicator. The indicator displays as follows with the complexity of the new password:

- Low: The password includes 8 or 9 characters and is a mixture of numbers, uppercase and lowercase letters.
- Medium: The password includes 10 to 12 characters and is a mixture of numbers, uppercase and lowercase letters. Or, the password includes 8 or 9 characters and is a mixture of numbers, uppercase and lowercase letters, and special characters.
- High: The password contains 10 to 12 characters and is a mixture of numbers, uppercase letters, lowercase letters, and special characters.
- 7. 选择 SINAMICS G120 智能连接模块的无线网络 SSID, 然后输入新的 Wi-Fi 密码启动连接。

Select the wireless network SSID of the SINAMICS G120 Smart Access and then enter the new Wi-Fi password to launch the connection.

8. 输入 IP 地址(<u>http://192.168.1.1</u> 或 <u>https://192.168.1.1</u>)打开主页。 Enter the IP address (http://192.168.1.1 or https://192.168.1.1) to open the home page.

### 无线网络连接示例 Wireless network connection examples

#### Windows 7/Windows 10

- 1. 点击 PC 任务栏上的 4 图标。 Click 4 on the taskbar on your PC.
- 选择目标网络并输入无线网络密码启动连接。 Select the target network and enter the wireless password to launch the connection.



#### Android/iOS

进入平板电脑或智能手机的 Wi-Fi 设置窗口,选择目标网络并输入无线网络密码启动连接。

Go to the Wi-Fi setting window on your tablet or smart phone, select the target network, and then enter the wireless password to launch the connection.



G120 smart access\_60c3e2

# 复位 Wi-Fi 配置 Resetting Wi-Fi configuration

在 SINAMICS G120 智能连接模块通电状态下按住复位按钮三秒以上可将 SINAMICS G120 智能连接模块的 Wi-Fi 配置复位至出厂默认值。

When the SINAMICS G120 Smart Access is in power-on state, holding down the reset button for more than three seconds resets the Wi-Fi configuration of the SINAMICS G120 Smart Access to factory defaults.

- Wi-Fi (SSID): G120 smart access\_xxxxxx
  - "xxxxxx" 代表模块 MAC 地址最后六个字符。
  - "xxxxxx" stands for the last six characters of the module MAC address.
- Wi-Fi 默认密码 Wi-Fi default password: 12345678
- 默认频率通道 Default frequency channel: 1

#### 说明 Note

在按下复位按钮复位 Wi-Fi 配置之前,确保 SINAMICS G120 智能连接模块上 Wi-Fi 通信 LED 的状态为绿色长亮/黄色长亮或绿色闪烁。Wi-Fi 通信 LED 状态为黄色闪烁表示 Wi-Fi 配置复位成功。复位后,重启 SINAMICS G120 Smart Access.

Before pressing the reset button to reset the Wi-Fi configuration, make sure that the Wi-Fi communication LED on the SINAMICS G120 Smart Access lights up solid green/solid yellow or flashes green. The Wi-Fi configuration is reset successfully when the status of the Wi-Fi communication LED flashes yellow. After resetting Wi-Fi configuration, restart SINAMICS G120 Smart Access.

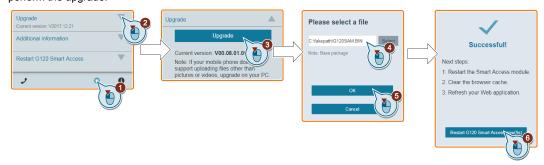
### 升级 Upgrading

在 SINAMICS G120 网页上进行升级可升级模块的固件版本。

Upgrading on the SINAMICS G120 Web page upgrades the firmware version of the module.

#### 常规升级 Conventional upgrading

- 1. 从以下网站下载目标升级文件(\*.bin 文件)至本地盘(推荐在 PC 上操作): Download the target upgrade file (\*.bin file) from the following Web site to your local drive (recommended on PC): https://support.industry.siemens.com/cs/ww/en/ps/13225
- 2. 访问 SINAMICS G120 网页: <a href="http://192.168.1.1">http://192.168.1.1</a>] 或 <a href="https://192.168.1.1">https://192.168.1.1</a>]。按照以下步骤执行升级: Access the SINAMICS G120 Web page: <a href="http://192.168.1.1">https://192.168.1.1</a>] or <a href="https://192.168.1.1">https://192.168.1.1</a>]. Proceed as follows to perform the upgrade:



升级成功后, SINAMICS G120 Smart Access 会在10秒倒计时结束后自动重启。

After upgrading is successfully complete, the SINAMICS G120 Smart Access will restart automatically after the 10-second countdown time has elapsed.

3. 清除浏览器缓存并刷新网络应用程序。

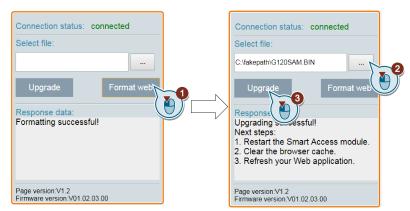
Clear the browser cache and refresh your Web application.

#### 基本升级 Basic upgrading

若常规升级失败, 可进行基本升级。

Basic upgrading is applicable only when conventional upgrading fails.

- 1. 从以下网站下载目标升级文件(\*.bin 文件)至本地盘(推荐在 PC 上操作): Download the target upgrade file (\*.bin file) from the following Web site to your local drive (recommended on PC):
- https://support.industry.siemens.com/cs/ww/en/ps/13225
- 2. 模块处于断电状态时,按住模块上的复位按钮,然后给模块上电。
- Hold down the reset button when the module is in power-off state and then power on the module.
- 3. 打开基本升级的网站: Open the following Web site specific for basic upgrading: http://192.168.1.1/factory/basicupgrade.html
- 4. 按照以下步骤完成升级操作。Proceed as follows to complete the upgrade.



5. 重启模块,清除浏览器缓存,并刷新网络应用程序。

Restart the module, clear the browser cache, and refresh your Web application.

### 补充信息 Additional information

ANATEL 证书的葡萄牙语声明 Statement in Portuguese about the ANATEL certificate:

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

SINAMICS G120 智能连接模块符合无线电设备指令 2014/53/EU。可从以下链接下载证书: https://support.industry.siemens.com/cs/ww/en/ps/13225/cert。

SINAMICS G120 Smart Access is in compliance with Radio Equipment Directive 2014/53/EU. You can download the certificate from the following link: https://support.industry.siemens.com/cs/ww/en/ps/13225/cert.

扫描二维码下载 STNAMICS G120 智能连 接模块的用户于那册。 Scan the QR code to download SINAMICS G120 Smart Access user documentations.



...或使用链接: ... or follow the link:

https://support.industry.siemens.com/cs/ww/en/ps/13225/man





...或使用链接: ... or follow the link:

https://support.industry.siemens.com/cs/ww/en/sc/2





...或使用链接: ... or follow the link:

https://support.industry.siemens.com/cs/ww/en/ps/1322 5/cert





...或使用链接: ... or follow the link:

https://www.automation.siemens.com/aspa\_app/?lang=en&showLayer=0