

#### Product and Service Data Sheet

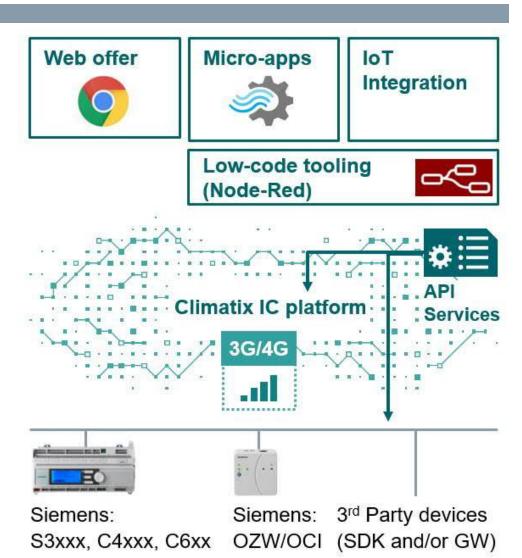
# Climatix IC

Type 1: Manually renewable subscription



Climatix IC permits cloud-based remote monitoring and intelligent diagnostic as well as optimization and control of building technical plants with heating, air conditioning, and district heating applications.

- Onboard Climatix controller connectivity (no Gateway)
- Data logging via Change of Value (COV), Polling or Dynamic settings
- Multi-site overview and command data points
- Consolidated alarm dashboard and alarm diagnostic tooling
- On-line actions including FW upgrade, parameter file back-up, log-file generation
- RESTful API access for integration of third-party applications
- Integration of external data sources (e.g. IoT devices) via Virtual Cloud Items (VCIs) and Virtual Cloud Plants (VCPs)
- Cloud data architecture with uniquely labeled data points for use by analysis tools at the product line level
- Low-Code Workflow-Editor (Node-RED) for fast programming, cloud-based Services (e.g. logic-controlled troubleshooting, FDD)
- Automated report generation



### Requirements

Condition	Description
Hardware	This Service is compatible with the Climatix range of Siemens controllers, and OZW772, OZW672, OCI670 web servers. Third-party data sources and IoT devices may be integrated via the RESTful Cloud API. A compatible device must be purchased and installed to implement this Service accordingly.
Web browser and viewing devices	The recommended browsers for use with the Service are Chrome, Firefox, Safari IoS and Edge.
Internet connection	Provisioning of the Service requires an Internet connection.
Contractual documents	Your company must sign a Master Order Form with your local Siemens entity to be eligible for this Service. This Master Order Form is tied into the 'Digital Service Agreement' (DSA) together with this 'Product and Service Data Sheet' (PSDS) which is the Specification Document for this Service and any further Exhibits to the foregoing. All the above-mentioned documents make up the contractual documents.
Subscription	A valid subscription ordered and accepted in accordance with the Master Order Form is required to use this Service.

# Functions – Description of Services

OEMs and installers typically use Climatix IC to support plant servicing and monitor plant performance.

OEMs use Climatix IC in their product lines for application tests, device versioning, production end tests, and performance certifications.



Individual functions can be implemented for Climatix IC (China) in slightly modified form. Consult the IC manual.

#### Web interface and API

#### Climatix IC - URL



- Climatix IC: <a href="https://www.climatixic.com">https://www.climatixic.com</a>.
- Climatix IC (China): https://climatixic.siemens.com.cn.

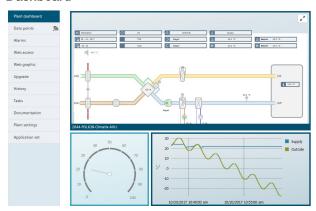
# **Plants**

A Climatix IC plant is the digital twin of the connected controller. Plants are created by mapping the required data-points and system settings to the cloud.

# Plant overview (Map)

Provides an overview of all connected plants and selected KPIs via Google Maps. Depending on the zoom, plants are grouped geographically, and the selected value is visualized in bubble diagrams.

#### **Dashboard**



- Each user can set up individual dashboards that extend to the entire tenant area.
- In addition, application and simultaneous role-specific dashboards can be set up.

#### Web graphics

Plant depictions can be displayed in the cloud as Scalable Vector Graphics (SVGs). The included graphic configurator can enhance SVG graphics directly in Climatix IC with data points, texts, etc.

#### **Trend Viewer**



- The data history is presented on interactive charts
- allowing users to see single or multiple trends over chosen time periods with customizable x y axis.
- Multiple diagrams can be depicted in one view to optimize diagnosis.

#### Online actions

Remote FW upgrade, parameter back up with scheduler, controller log file creation and controller re-start.

#### **Alarms**

Notification on alarm events and notifications per email or webhook. Events are saved in the alarm history.

#### Remote-HMI@Web access

HMI@Web can remotely access the web server integrated on the controller. The depiction can be modified or, if needed, rendered the same as the local HMI on the controller.

#### Sub-tenants

One Main-Tenant (e.g. OEM) can create multiple Sub-Tenants (e.g. regional companies). Newly connected plants can be assigned automatically (via distribution key) or manually to specific Sub-Tenants.

#### Application and documentation files

Easy-to-use upload and download functions are available for both applications and freely usable documentation files.

Backup and restore of parameter files can be automatically scheduled.

All access can be defined for the user roles.

#### Application sets

OEM application engineers create complete Climatix software packages (e.g. BSP firmware, Sapro application, watch page mappings, HMI file) as application sets for plant types.

Plant commissioning engineers use the sets without the need for detailed knowledge of the included program components.

#### User administration

Creates and manages role-based access to data and functions for both plants as well as the cloud. Roles (e.g. OEM factory, service, owner, and end user) and their entitlements can be changed and expanded.

#### **Cloud API**

The RESTful API provides access to cloud stored data and management of plants and users via HTTP queries.

#### **Cloud Device API**

Supplies cloud access to the data stored on the controller through a VPN tunnel. Queries can be sent directly to the controller API via HTTP/JSON. This permits the query of real-time values or values not mapped to the cloud.

#### Virtual Cloud Items (VCIs) and Virtual Cloud Plants (VCPs)

External data (e.g. weather info) can be mapped via API to VCIs and read or written by virtual or physical plants. The external data can also be saved to VCPs. VCIs and VCPs permit key use cases such as storing calculated data or integration of IoT devices.

#### Webhooks

Subscription-based push service for alarms and specified data points (not for ICxx.300). Multiple Webhook instances can be sent to various recipients.

#### **Remote Tool Access**

Remote access for Climatix engineering tools via a secured VPN connection.

#### Low-code workflow editor

Node-RED is a leading IoT workflow editor to support large software ecosystems. It can be employed for example to use data stored in the cloud on external devices or to create cloud-based control algorithms. Engineering is simplified by dragging NodeJS-Snippets, embedded Climatix IC API, and auto detection of cloud assets and data points. Available for field test.

### Reporting

BIRT is a leading business intelligence reporting tool that can be used to generate automated reports per plant or tenant. Available for field test.

### Climatix IC data hosting

Climatix IC data can be saved and processed georedundant in western European data centers.



For information pertaining to personal data, see "Contractual documents [ $\rightarrow$  11]".

### Climatix IC data security

Communication between controller and cloud via HTTPS with SHA 256 encryption. Penetration tests conform to CSA SAL-2.

# Cloud API-specific

Service	Description
Function	The RESTful API (Representational State Transfer) provides access to data stored in the Cloud and management of plants and tenants using HTTP queries (GET, PUT, POST and DELETE). The data is represented in JSON.
Power	Limited to 100 requests / second by default.
No charge starter offer	Users can subscribe to the no-charge "STARTER" offer via the following link: https://portal.api.climatixic.com.
Support	Support per subscription key: 2 named developers/contact persons.  Response time: 5 workdays.

### Subscription Service matrix

IC menus				IC	xx.		
			300	350	400	500	520
User authentication	Username, password, or affiliated single sign on via Siemens ID, Google, Microsoft (on request) or LinkedIn.	Х	Х	Х	Х	Х	Х

IC menus			ICxx.							
		100	300	350	400	500	520			
Overview										
Мар	Geographic position of your plants on a map.	Х	Х	Х	Х	Х	Х			
with KPIs	Configurable key performance indicators (KPIs) can be applied to available plants.  4 status levels with definable pop-up text.	-	-	X	X	X	X			
Overview	Plant dashboard (can be configured) as tiles on all plants.	Х	Х	Х	Х	Х	Х			

IC menus			ICxx.							
		100	300	350	400	500	520			
Operate										
Overview	Plant overview.	X	Х	Х	Х	Х	Х			
Trend data	Visualization of trend data.	-	Х	Х	Х	Х	Х			
Plant dashboard	Plant cockpit to control a plant (can be configured via a central dashboard) in tiles.	-	Х	Х	Х	Х	Х			
Data points	Data point storage and access including Trend viewer.	-	Х	Х	Х	Х	Х			
Alarms	Plant alarms on alarm event and alarm resolution. Alarm history.	Х	Х	Х	Х	Х	Х			
Web access	Access to local web server, for example HMI@Web.	Х	Х	Х	Х	Х	Х			

IC menus				IC	xx.		
		100	300	350	400	500	520
Web graphic	SVG-based web graphics with access appropriate to the role.	-	Х	Х	Х	Х	Х
Upgrade	Remote firmware upgrade Service, with scheduler.	-		Х	Х	Х	Х
Trend Viewer	Single and multiple trends per chart and also multiple charts per view to assist with diagnostics. Trend downloads via CSV. Adaptable X and Y axis, definable min/max limits and definable trend colors.	-	Х	Х	Х	Х	Х
History	History for setpoints and system commands.	-	Х	Х	Х	Х	Х
Scheduler program	Settings for scheduler and calendar.	-	-	-	Х	Х	Х
Tasks	Overview of active tasks and task history.	Х	Х	Х	Х	Х	Х
Files	Available documentation for the assigned application set, accessible via user roles. Individual plant files (e.g. Service log files).	-	Х	Х	Х	Х	Х
Climatix S300: Security levels	Level 0 (all data points, inclusive system page) and Level 253 (only application data points).	-	-	Х	-	-	-
Webhooks	Subscription-based push Service for alarms and specified data points (not for ICxx.300).	-	(X)	Х	Х	Х	Х
Virtual Cloud Items	External data (e.g. weather info) is mapped via API to VCIs and read or written by virtual plants or a plant with a physical controller.	-	-	Х	Х	Х	Х
Virtual Cloud Plant	External data can be saved to VCPs via API. VCPs are listed, in addition to plants with physical controllers, in the plant list. VCPs can, for example, group multiple IoT devices with no relationship to a Climatix controller and operate them in the cloud.	-	-	Х	Х	Х	Х

IC menus				IC	xx.		
		100	300	350	400	500	520
Application sets							
Overview	Overview of available application sets.	Х	Х	Х	Х	Х	Х
Administration	Basic data, alarm and security level settings.	Х	Х	Х	Х	Х	Х
Tenant Application set	Tenant-wide application can be defined for all connected plants avoiding plant-by-plant updates.	Х	Х	Х	Х	Х	Х
Parameter backup	Time scheduled, automatic parameter backup.	-	-	-	Х	Х	Х
Plant files	Linked applications and BSPs.	Х	Х	Х	Х	Х	Х
Export/import application sets	Enables application set templates to be created and exported for use with other plants.	Х	Х	Х	Х	X	Х
Documentation	Linked documentation.	Х	Х	Х	Х	Х	Х

IC menus		ICxx.							
		100	300	350	400	500	520		
Administration									
Overview	Overview of assigned/unassigned plants.	Х	Х	Х	Х	Х	Х		
Plants	Manage assigned/unassigned plants.	Х	Х	Х	Х	Х	Х		
Plants \	Define plant users, alarm messages and replace controllers.	Х	Х	Х	Х	Х	Х		
User	Create administrators and assign administrator roles.	Х	Х	Х	Х	Х	Х		
Tenants	Edit tenant settings, including distribution. All billing information.	Х	Х	Х	Х	Х	Х		
Plant roles	Roles at the plant level can be defined for each tenant, e.g. end user, factory, service and owner.	Х	Х	Х	Х	Х	Х		
Pre-registration	Preregister multiple plants (e.g. at OEM factory) using an individual activation key.	Х	Х	Х	Х	Х	Х		
Sub-tenant	Controllers can be automatically organized into Sub-Tenants (e.g.: Country or installer) via use of a distributor key.	Х	Х	Х	Х	Х	Х		
M2M	Vodafone SIM cards supplied with the Siemens M2M solution, are integrated in Climatix IC and can be paired to selected plants. Data usage is also billed by Siemens to provide a single-source solution that	Х	Х	Х	Х	Х	Х		

IC menus				IC	xx.		
		100	300	350	400	500	520
	significantly simplifies the logistical challenge of managing wireless connectivity.						

# Cloud data and storage

Data points and alarms		ICxx.								
		100	300	350	400	500	520			
Data points (DPs) stored in cloud per controller	0 DPs	Х	-	-	-	-	-			
	DPs stored on the local gateway	-	Х	-	-	-	-			
	DPs defined by application	-	-	Х	-	-	-			
	Max 50 DPs	-	-	-	Х	-	-			
	Max 500 DPs	-	-	-	-	Х	Х			
Data point storage included in basic offer	Data stored for 12 months. Time extensions available on request.	-	-	Х	Х	Х	-			
	Data stored for 10 years. Time extensions available on request.	-	-	-	-	-	Х			
Alarm entries	500	Х	Х	Х	Х	Х	Х			

Cloud Event Traffic (CET)	(CET) ICxx.					
	100	300	350	400	500	520
50 bundle:1.5 Giga (10 <sup>9</sup> ) per subscription period 200 Bundle: 5.5 Giga (10 <sup>9</sup> ) per subscription period 1000 Bundle: 30 Giga (10 <sup>9</sup> ) per subscription period	-	-	-	Х	-	-
Unlimited Cloud Event Traffic (CET)	-	-	-	-	Х	Х

#### **Pricing models**

### Start with a 4-month free trial project

New users are offered a free trial version with all features for up to 4 months. Users can continue the Service by upgrading to one of the described subscriptions during the trial period. Otherwise, the free version automatically expires and is switched to IC20.100 (free offer with limited functionality). The controllers used during the trial period must be ordered separately through normal commercial channels.

### "Annual" subscription

Permits a defined number of connected controllers for a period of one year. Payment is in advance (prepaid). The Tenant Billing Administrator is notified via email a month before the subscription expires.

### "Monthly" subscription

A defined number of credits are deducted from the user balance for the months that the controller is connected to the Service.

#### Digital wallet

"Digital wallet" was be rolled out worldwide with Deployment DI14.

"Digital wallet" permits the user to independently manage Climatix IC products. You can manage credit purchases, choice of subscriptions and extensions, transfers to sub-tenants, and control of consumption data quickly and without an interface, similar to how consumers shop in stores.

# **Basic API subscriptions**

The prefix to the subscription designation (ICnn) identifies the basic selection while also defining the API characteristic.

Subscription	Designation	Description				
IC10.xxx	C10.xxx Standalone API API only (portal.api.climatixic.com)					
		Cloud API access, 100 requests per second by default.				
		Cloud Device API access, provides access to device-stored data via a cloud tunnel.				
		NOTICE! Not possible together with ICxx.100				
IC20.xxx	Standalone web interface	Web UI only (www.climatixic.com/)				
		Controller data logging and storage plus comprehensive web-based application.				
		Activate card, dashboards (control and command data points adapted to role), FW upgrade, online actions, web graphics, alarm handling, etc.				
		Cloud Device API access, provides access to device-stored data via a cloud tunnel.				
IC30.xxx	Combined web interface	Combinations				
	with API (current value)	Extension based on IC20 with API access to current data points.				
IC35.xxx	Combined web interface	Combinations				
	with API (trend data)	Alternative extension based on IC20 with API access to current and historical (trend) data points. Including Webhooks and VCPs.				



We recommend refraining from frequently changing subscriptions and upgrade as needed from smaller to the next larger subscription.

# Subscription definition for hardware and application

The suffix to the subscription designation (ICnn.xxx) represents the hardware and application version.

Subscripti on	Function	Description	Hardware	Settlement
ICxx.100	Get connected	Fallback Service in the event of no paid subscription. Cannot be combined with IC10.	Independent	No charge
ICxx.300	OZW/OCI Web server	Climatix IC CONNECTED OZW772, OZW672, OCI670 web server.	Albatros2/RVD and LMS controllers.	Yearly
ICxx.350	Heat recovery ventilation	Climatix IC connected via onboard IP connectivity.	Climatix POS S300 controllers	Yearly
ICxx.400	Commercial applications	Climatix IC connected via onboard IP connectivity. Supports up to 50 DPs and data storage for one year.	Climatix POL4xx/6xx controllers	Yearly
ICxx.500	Commercial Applications	Climatix IC connected via onboard IP connectivity. Supports up to 500 DPs and data storage for one year (can be extended).	Climatix POL6xx controllers	Monthly

# Ordering

Climatix IC products are mapped to credits. "Digital Wallet" is explained in the section Pricing models.

Туре	Order number	Designation
POL0L2.00/STD	L55693-L120-A100	Climatix IC, without Digital Wallet
POL0L2.01/STD	P55693-L121-A100	Climatix IC, with Digital Wallet
POL0L6.70/STD	L55693-L167-A100	Rebranding
Ordering	Contact your local Siemens office to order the Service. You can order the required material via the Siemens Industry Mall ( <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> ) if you have already signed a master order form for digital Services with Siemens.	



### NOTICE

## Type 1: Manually renewable subscription

The subscription is type 1, which means that the subscription expires after a defined period and is not automatically renewed.

# Documentation

# **Contractual documents**

Contractual documents can be downloaded at: https://www.siemens.com/si/cloud/terms.

Contractual documents	Document ID
Master Order Form for Digital Services	A6V11913147
Digital Service Agreement for Americas	A6V11913125
Digital Service Agreement for Asia Pacific region	A6V11913127
Digital Service Agreement for Europe, Middle East, Africa	A6V11913130
Climatix IC Product & Service Data Sheet (Type 1)	A6V10449189
Data Processing Agreement for European Union countries (GDPR)	A6V11913092
Data Processing Agreement Attachments 1, 2, 3	A6V12168553
Minimum Terms and Acceptable Use Policy passed on to the customer	A6V11913116
Climatix IC Rebranding	A6V12127289



Not all information is available in the same manner for Climatix IC China.

Climatix IC product pages		
Delivery	Website	
Climatix IC	https://www.siemens.com/climatixic	
Climatix IC (China)	https://new.siemens.com/cn/zh/products/buildings/hvac/oem/remote-control-climatixic.html	

User guides		
Document ID	Title	
A6V10912669	Remote monitoring and intelligent diagnostic with POL controllers. For service personnel and end user.	
A6V11849163	Remote monitoring and intelligent diagnostic with S300 controllers. For service personnel and end user.	
A6V11269223	Remote access with OCI670 and OZW672. For service personnel and end user.	
CC1A7564	Solution combustion controls - LMV via POL648.80	
A6V11595065	RUT240, the seamlessly integrated M2M solution from Siemens	

Controller data sheets	
Document ID	Title
Q3903	Climatix controllers: POL687.xx
Q3230	Climatix controllers: POL63x.xx
A6V10990076	Climatix controllers: C600
A6V11276159	Climatix controllers: C400
A6V11417931	Climatix controllers: S300
C5712	Web server OZW672
A6V101022140	Gateway OCI670

Additional product information		
Description	Website	
Youtube: Climatix IC presentation	https://www.youtube.com/NuNjhyHyg	
Youtube: Specific user roles in Climatix IC	https://youtu.be/gtZJ9AwfLe0 (German)	
	https://youtu.be/kiPp014jrZA (English)	
Climatix IC web page with additional videos and information	https://www.siemens.com/climatixic	



Technical documentation is also available at: <a href="http://siemens.com/bt/download">http://siemens.com/bt/download</a>

#### Specific terms of use

Requirements	Description
Obligations for use of the Connect device at the connected site	You are solely responsible for the correct configuration, security and use of the Connect device after installation at the connected site, ensuring that the Connect device can connect with the Service and that the content, integrity, security and accuracy of the data being transferred is correct, up-to-date and regularly monitored.
Third-Party Terms for use of Service	This Service may include third party software Services, including open source software and/or commercial software that is distributed when accessing this Service. Such third-party software may be subject to additional or different terms, license rights, or require certain notices by their licensors, which we are obliged to pass on to you as your licensor and to which you agree to abide. The corresponding license terms can be found on the website of the Service.
Support	Customer Support may be contacted via the Support Request wizard at any time. https://support.industry.siemens.com/cs/ww/en/my Customer Support hours of operation are during office hours, typically Monday through Friday, 8:00 am to 5:00 pm, excluding national and local holidays. Support is available in English and in the local language in most of the countries.
Availability of Climatix IC	https://climatixic.siemens.com.cn

#### Rebranding your tenant area

The appearance of your tenant area can be rebranded to your specifications.

Туре	Description
Light	Standard Siemens log-in and navigation. Customer logo and Tenant-Name are personalized. DNS-URL hosted by Siemens.
Standard	Standard Siemens log-in. Navigation after log-in per customer specification. DNS-URL hosted by Siemens.
Full	Log-in page and navigation after log-in per customer specification. DNS-URL hosted by customer. The customer must periodically order the SSL certificate

#### Note the following on rebranding:

The rebranded version shall be available within sixty (60) working days after we received payment for invoices due unless otherwise agreed in at least electronic form in advance, provided that you have delivered the required templates in due time and in accordance with our instructions.

You shall maintain all notices and legends displayed in the Services as received from us. In case you choose the full rebranding option, you have to send us the necessary templates for your corporate information and your data privacy policy which we will incorporate into the Services. You may also choose to insert a copyright notice regarding your website design. Please note, however, that even the full rebranded option must display our copy-right notices, third party software licenses as well as the Applicable Use Policy.

# Security

The Service provides comprehensive security, e.g. data security, secure data storage, and reliable data transportation.

#### Security feature

Penetration tests conform to CSA SAL 2.

The security certificate is based on SHA-256 encryption between the controller and the cloud as well as between the cloud and the web client.

All connections are encrypted (HTTPS) to prevent tapping into the line and man-in-the-middle attacks.

Geo-redundant data storage within the EU.

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