

# Web-GATE



# CAREL

Technology & Evolution



## Web-GATE

WebGate is an innovative product that allows all Carel controllers to be connected to any Ethernet™-TCP/IP network.

These protocols have seen enormous development and diffusion in recent years, including in the HVAC sector, where until now they have been used above all for connection between the main supervisor stations.

Carel has always implemented the possibility to talk with other systems on all its controllers, and has constantly followed the evolution of communication technology.

The result of this commitment is that now, thanks to WebGate, the single controllers too can be connected, economically, to Ethernet™ networks and make the most of the TCP/IP protocol potential.

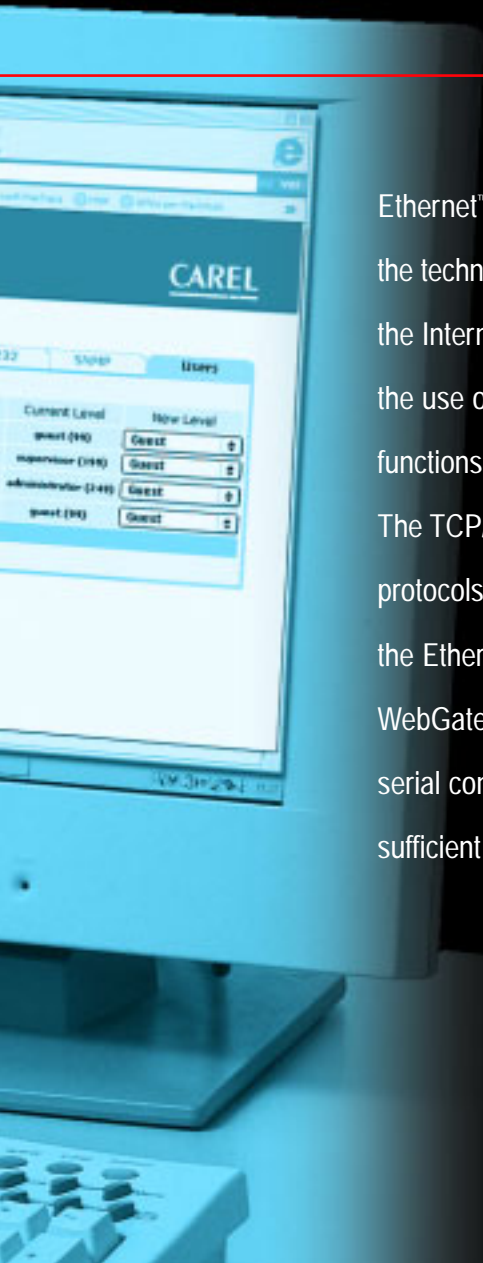
Indeed, WebGate makes all Carel controllers compatible with the most widespread communication standard in the world, without the need for a personal computer.

## Advanced communication technology

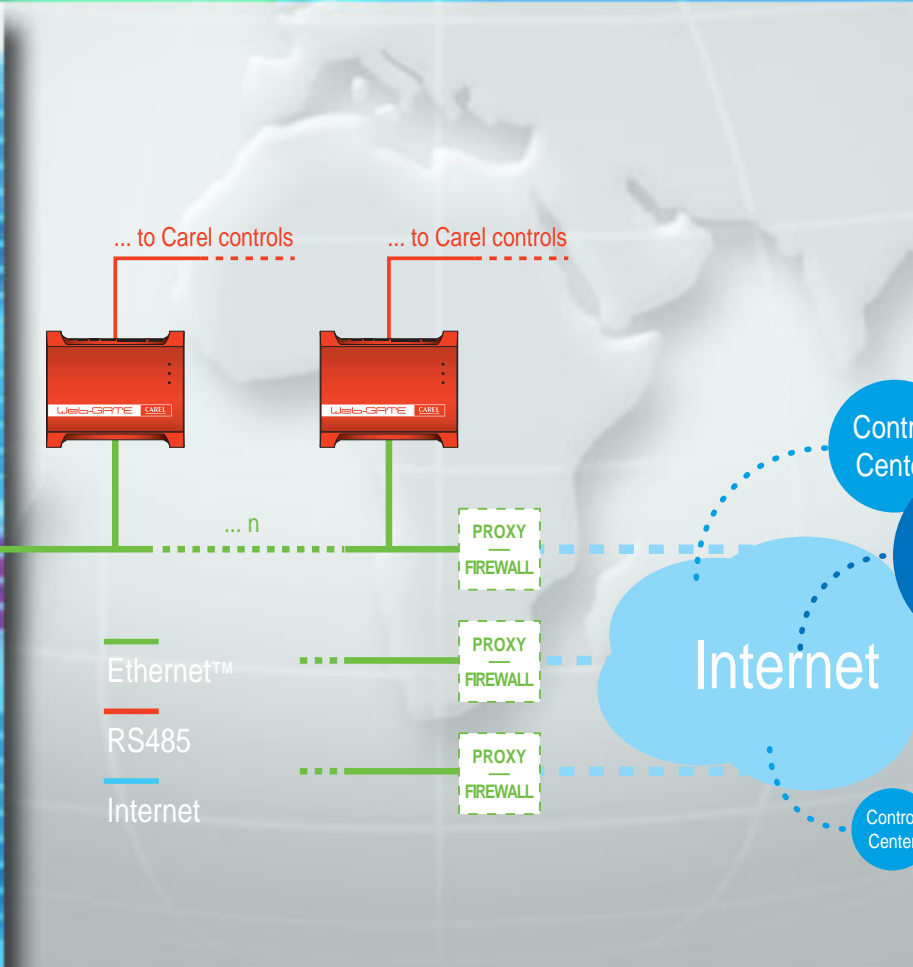
WebGate is a device that measures the same size as a normal desktop modem. It features avant-garde technology for connecting all Carel controllers to the local network. Ethernet™ is a widespread, fast, economical and reliable communication standard, and is the physical support for the TCP/IP protocol. Ethernet™ networks are now used in numerous different types of systems, and can thus be exploited as the backbone for the transmission of data, without needing to add further wiring in the supervision of the instruments.



Ethernet™ and TCP/IP are the technologies that underlie the Internet, and as a result WebGate allows the use of tools, such as web browsers, for performing diagnostic functions and the local and remote monitoring of the systems. The TCP/IP protocol can also be used as the support for other protocols, when transferring the data from the controls connected in the Ethernet™ network to a local or remote supervisor. WebGate is easy to configure either via the web or using an RS232 serial connection: as a matter of fact, only a minimum configuration is sufficient for setting the individual IP address.



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## SNMP protocol

WebGate is also an SNMP gateway. It in fact converts the Carel communication protocol to the Simple Network Management Protocol (SNMP), the protocol used to send data from the instruments on the Ethernet™ – TCP/IP network to a local or remote supervisor for subsequent processing.

SNMP is a protocol developed specifically for the management of TCP/IP networks, founded in 1988 based on the specifications of the IAB (Internet Administration Board), the body that supervises the Internet protocol. This is thus a protocol developed specifically for the management of data on TCP/IP networks, and is consequently very widespread and suitable for the specific application.

## WEB SERVER functions

One of the main functions performed by WebGate is the WebServer function: using the HTTP (Hyper Text Transfer Protocol) standard, WebGate can "serve" web pages to client computers connected in a local network or WAN.

The web pages are written based on the characteristics of the specific installation, for the management of the data from the instruments via the Carel RS485 network. The user can thus display and modify the installation parameters using an Internet browser, such as Microsoft® Internet Explorer™ or NetScape Navigator®, as the interface, and typing in the IP address of the WebGate.

The pages can be written using numerous readily available programs, such as Microsoft® FrontPage™ or Macromedia® Dreamweaver® (recommended).

These are HTML editors that can be used to create even very complex web pages with only basic knowledge of the web page programming language.

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## FTP protocol

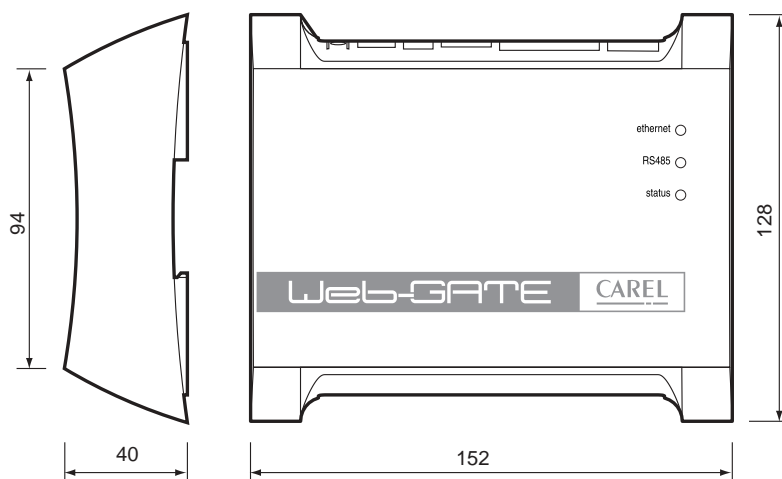
The web pages relating to the specific installation are saved to the "flash" memory inside the WebGate (400KB available) via FTP (File Transfer Protocol), the protocol used to transfer files on TCP/IP networks.

An FTP software client, such as SmartFTP, is used to connect to the WebGate on the TCP/IP network and consequently access its FileSystem in the same way as using the "Explorer" utility in the Windows® operating systems. Then, using simple "drag and drop" operations with the mouse, the web page HTML files can be copied from the user's computer to the WebGate.

The SNMP functions are complementary to the HTTP functions: as a result, an Internet browser, which uses HTTP, can be used to access the installation data for modification or monitoring. Nonetheless, it is not possible to perform the other typical supervisor functions, such as logging the data, managing alarms, etc. These functions in fact require a supervisor that is continuously connected to the WebGate, and which receives the data from the controllers via the TCP/IP network. These are then sent to the WebGate via the SNMP protocol and can be managed by a supervisor with SNMP management functions.



## Dimensions:

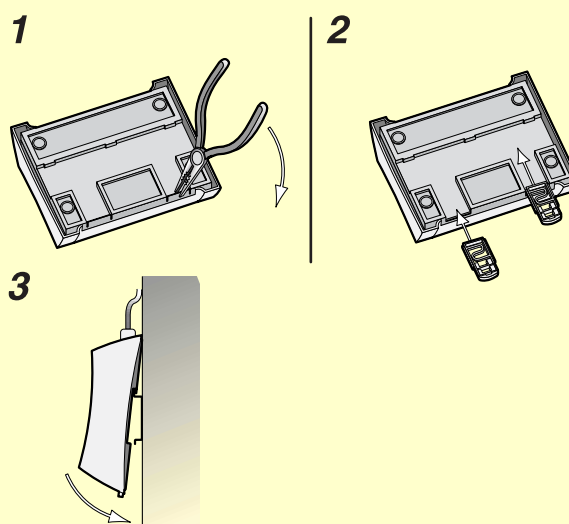


## Technical specifications

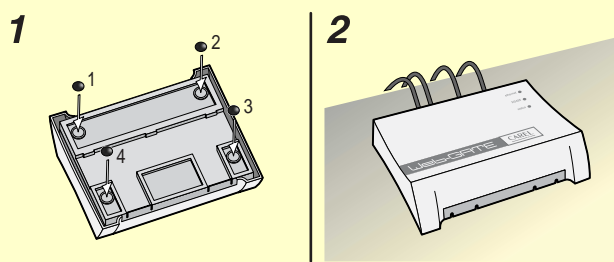
<b>Web server:</b>	•
<b>Internet protocols:</b>	
TCP/IP	•
HTTP	•
FTP	•
SNMP v1	•
<b>Serial protocols:</b>	Carel Protocol
<b>Installation:</b>	
desktop	•
panel mounting	•
<b>Ethernet™ interface:</b>	10 BaseT
<b>Power supply:</b>	18÷24Vac
<b>Memory:</b>	1MB Flash 0,4MB for Web
<b>Serial port:</b>	RS232
<b>General characteristics:</b>	
operating temperature	0T50
storage temperature	0T70
relative humidity	<90%
<b>Dimensions (mm):</b>	152x128x40

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- Windows®, FrontPage®, Internet Explorer™, are registered trademarks of Microsoft Corporation.
- Netscape Navigator® is a registered trademark of Netscape Communication Corporation.
- Macromedia® and Dreamweaver® are registered trademarks of Macromedia.

### Panel mounting



### Desktop



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