



Climatix™

Climatix communication Advanced Web module

POL909.50/xxx

Equipped with 64 MB of flash memory, 64 MB of SDRAM

Communication module to enable Web functionality for a
POL6xx.xx controller

The POL909.50/xxx communication module offers the following features:

- Internet-based device powered by ARM926EJ-S™ ARM® Thumb® Processor
- Embedded WindowsCE® platform with Web server application
- Generic tree view to read and write data points
- Platform to program Web applications
- Network parameters configurable via controller, HMI, SCOPE or Web
- The module must be connected to the left side of a POL6xx.xx controller
- Alarm server for SMS / mail
- Peer-to-peer communication
- RAS server
- Full modem RS-232 port
 - GSM / GPRS support
 - Dial in and dial out

The POL909.50/xxx communication module is part of the Climatix product range (also refer to Data Sheet 3900 and Mounting Instructions M3910).

Advanced Web module

The advanced Web module extends the communication capabilities of the Climatix controllers. It communicates using different protocols that can be loaded to the embedded WindowsCE platform.

With the preloaded WindowsCE operating system, all network address parameters can be set statically, handled by a DHCP server or, if nothing is present, negotiated by the AutoIP functionality of the operating system.

To manage the device, a set of Web-based extensions for the Web server are loaded to download files to access the registry or handle processes.

Unlike other solutions, the AWM can be handled in managed and unmanaged networks.

Functions

The advanced communication module (AWM) is an Internet-based device powered by ARM926EJ-S™ ARM® Thumb® Processor. Equipped with 64 MB of flash memory, 64 MB of SDRAM, the possibility of using SD-card and preloaded with WindowsCE operating system, the AWM is a powerful starting point for an Internet or communication application. To allow access to local area networks, the onboard Ethernet controller provides the flexibility to integrate this device into networks.

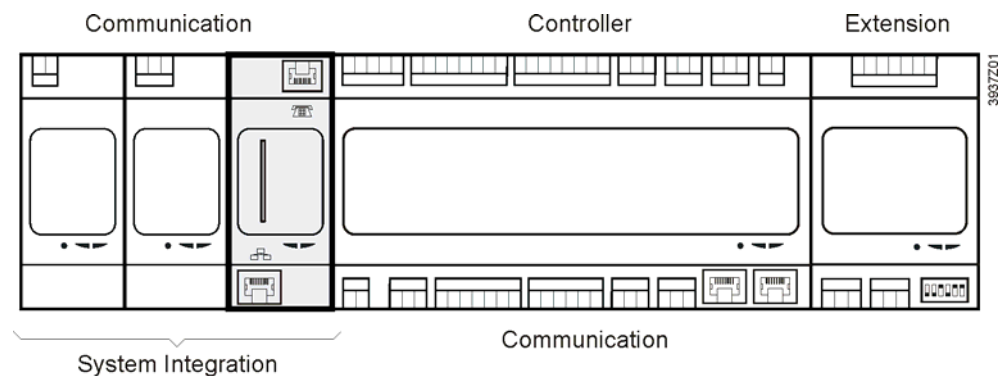
Software Web server

The Web server with its BGI capabilities and the remote management extensions (RMS) enable the user to implement and load his own Web pages and extend them with programmed Web functions. Using the RMS, all pages can be loaded to the file system. No more recompilations or firmware setup is needed. The access to certain pages can be granted based on user or group policies.

Generic tree view

The preloaded generic tree view application always reflects the loaded control program. After a modification of the controller application, only one restart is necessary to enable the operation of data points inside a Web browser. With the Java technologies used, this operation always shows the actual process data of the Climatix controller.

Installation concept



Technical data

General data	Dimensions	W x H x D: 45 x 110 x 75 mm
	Weight excl. packaging	102 g
	Base	Plastic, pigeon-blue RAL 5014
	Housing	Plastic, light-grey RAL 7035
	Power supply	Via system interface from controller DC 5 V (+5% / -5%), max. 270 mA
	Microprocessor	ARM926EJ-S™ ARM® Thumb® Processor, 400MHz
	Memory	64 MB NAND FLASH (3,3 V) 64 MB SDRAM (133MHz) SD-Card Support
	Data connectivity	- 10BaseT Ethernet, with link detection - Modem
	Connectors:	
	RJ45-10BaseT Ethernet	with link detection
RJ45-RS-232 serial	with full modem support	
Flash programming	JTAG support through CPU, download via Ethernet	
Software		
Operating system	Windows CE 6.0	
Storage	FlashFile System	
Web server	With BGI extension and access security	
RMS	Remote management for file handling, process management and registry	
Generic treeview	Out of the box operation of loaded HVAC applications	
SD-Card slot	SD-Card up to 8 GB	
IP	Ethernet 10/100 Mbit (IEEE 802.3U) Cable connection	
		RJ45 jack, 8 pins
Modem port	Cable connection RS-232	
		RJ45 jack, 8 pins Support of GSM, GPRS Modems
COMM interface plug	Board-to-board	ZEC1,0/10-LPV-3,5 GY35AUC2CI1



Environmental conditions	Operation	IEC 721-3-3
	Temperature	-40...70 °C
	Humidity	<90% r.h.
	Atmospheric pressure	Min. 700 hPa, corresponding to max. 3,000 m above sea level
Protection	Transport	IEC 721-3-2
	Temperature	-40...70 °C
	Humidity	<95% r.h.
	Atmospheric pressure	Min. 260 hPa, corresponding to max. 10,000 m above sea level
Standards	Degree of protection	IP20 (EN 60529)
	Product safety	
	Automatic electrical controls	EN 60730-1
	Electromagnetic compatibility	
	Immunity	EN 60730-1 +A16
	Emissions	EN 60730-1 +A16
	CE conformity	
	EMC directive	2004/108/EC
	Low-voltage directive	2006/95/EC
	Listings	UL916, UL873 CSA C22.2M205
RoHS directive	2002/95/EC (Europe) ACPEIP (China)	
Ordering data	Climatix advanced Web module	POL909.50/STD

Advanced Web module LEDs for diagnostics



LEDs for BSP and BUS diagnostics (green, red and yellow)

Mode	BUS LED status
Application running and communication ok	Green on
Startup	Yellow on
Hardware/Software error	Red on
Application update	Green/Red blinking at 1 Hz

Mode	BSP LED status
BSP running and communication with controller	Green on
BSP running but no communication with controller	Yellow on
BSP error (software error)	Red blinking at 2 Hz
BSP updating	Green/Red blinking at 1 Hz

Engineering notes

- The communication module is attached to the controller with a board-to-board connector
- The connection to Ethernet is made via the T-IP port (RJ45 jack)

Disposal notes



The module contains electrical and electronic components and must not be disposed of together with household waste.

Local and currently valid legislation must be observed!

Layout of POL909.50/xxx communication module

