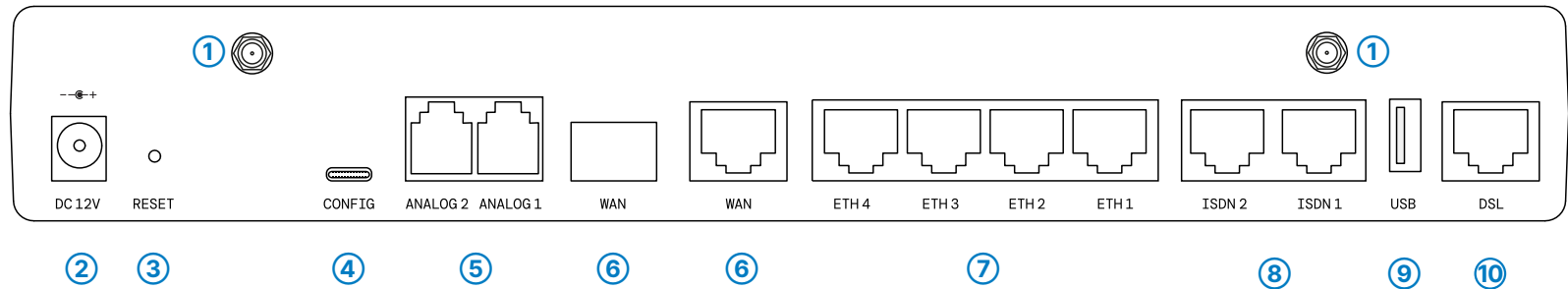
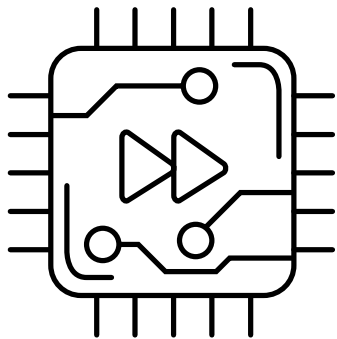


Hardware Quick Reference

LANCOM R903



① Wi-Fi antenna connectors
Screw the supplied Wi-Fi antennas to the appropriate connectors.



② Power supply connection socket
Use only the supplied power adapter!



③ Reset button
Short press > device restart
Long press > device reset



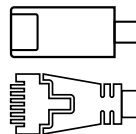
④ Serial USB-C configuration interface
A USB-C cable can be used for optional configuration of the device on the serial console. (cable not included)



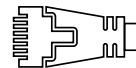
⑤ Analog interfaces
Connect analog terminal devices to the analog interfaces either directly via RJ11 or with the help of the enclosed TAE adapters.



⑥ WAN interfaces (SFP / TP combo port)
Insert a suitable LANCOM SFP module (e.g. 1000Base-SX or 1000Base-LX) into the WAN SFP interface. Choose a cable compatible with the SFP module and connect it as described in the SFP module's mounting instructions www.lancom-systems.com/SFP-module-MI. (SFP module and cable are not included)
If desired, alternatively connect the WAN TP interface to a WAN modem using an Ethernet cable.



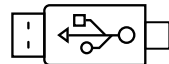
⑦ Ethernet interfaces
Use a suitable Ethernet cable to connect one of the interfaces ETH 1 to ETH 4 to your PC or a LAN switch.



⑧ ISDN interfaces
ISDN 1: Internal (NT) ISDN bus
ISDN 2: Internal (NT) ISDN-bus



⑨ USB interface
Connect a USB data medium or a USB printer to the USB interface. (cable not supplied)



⑩ VDSL / ADSL interface
Connect the VDSL interface and the TAE socket of the provider using the enclosed DSL cable for the IP-based connection. (For more information, please contact your Internet provider).



Before initial startup, please make sure to take notice of the information regarding the intended use in the enclosed installation guide!

Operate the device only with a professionally installed power supply at a nearby power socket that is freely accessible at all times.

The power plug of the device must be freely accessible.

Please note that support for third-party accessories is not provided.

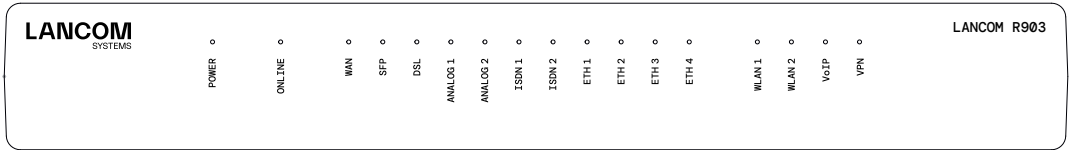
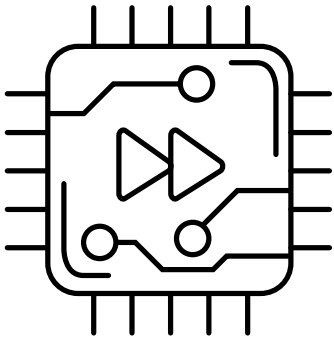


Please observe the following when setting up the device

- When setting up on the table, use the enclosed self-adhesive rubber pads, if applicable.
- Do not rest any objects on top of the device and do not stack multiple devices.
- Keep all ventilation slots of the device clear of obstruction.
- Rack installation with the optional LANCOM [CPE blackline Rack Mount](#) / [CPE blackline Rack Mount Plus](#) (separately available)

Hardware Quick Reference

LANCOM R903



A	B	C	D	E	F	G	H	I	J	K
A Power						G ISDN 1 / ISDN 2				
Off	Device switched off					Off	Interface switched off			
Blue, permanently*	Device ready for operation or device paired and LANCOM Management Cloud (LMC) accessible.					Blue, permanently	D channel active			
1x blue, inverse blinking*	Connection to LMC active, pairing OK, device not claimed					Blue, blinking slowly	Active incoming or outgoing call			
2x blue, inverse blinking*	Pairing error or LMC activation code/ PSK not present.					Blue, flashing	BUS faulty, no terminal device on			
3x blue, inverse blinking*	LMC not reachable resp. communication error					H ETH1 - ETH4				
						Off	No link available or interface switched off			
						Blue, permanently	Link available, no data transmission			
						Blue, flickering	Data transmission			
B Online						I WLAN 1 / WLAN 2				
Off	WAN connection not active					Off	No Wi-Fi network defined or Wi-Fi module disabled. No beacons are sent from the Wi-Fi module.			
Blue, blinking	WAN connection in progress (e.g. PPP negotiation)					Blue, blinking	DFS Scanning or other scan process			
Blue, permanently	WAN connection active					Blue, permanently	At least one Wi-Fi network defined and Wi-Fi module activated. Beacons are sent from the Wi-Fi module.			
C WAN										
Off	No link available / interface switched off					J VoIP				
Blue, permanently	Link available, no data transmission					Off	No SIP accounts defined or VCM disabled			
Blue, flickering	Data transmission					Blue, blinking	Not all defined and active SIP accounts have been registered (possibly still being established)			
D SFP						Blue, permanently	All defined and active SIP accounts (outgoing) have been registered successfully			
Off	No link available / interface switched off					K VPN				
Blue, permanently	Link available, no data transmission					Off	No VPN connection active			
Blue, flickering	Data transmission					Blue, blinking	VPN connection in progress			
E DSL						Blue, permanently	VPN connection active			
Off	Interface switched off									
Blue, blinking / fast blinking	DSL Handshake									
Blue, permanently	DSL Training									
Blue, permanently	DSL Sync									
Blue, flickering	Data transmission									
Blue, flashing	Hardware error									
F Analog 1 / Analog 2										
Off	Interface switched off									
Blue, permanently	Interface activated									
Blue, blinking	Active incoming or outgoing call									

Hardware	
Power supply	12 V DC, external power adapter For an overview of the power supplies compatible with your device, see www.lancom-systems.com/kb/power-supplies .
Environment	Temperature range 0 – 40 °C; humidity 0 – 95 %; non-condensing
Housing	Robust plastic housing, connectors on the back, prepared for wall mounting; dimensions 293 × 44 × 190 mm (W x H x D)
Fan	1 quiet fan
Interfaces	
VDSL2	VDSL2 acc. to ITU G.993.2; profiles 8a, 8b, 8c, 8d, 12a, 12b, 17a, 30a, 35b VDSL2 Supervectoring acc. to ITU G.993.2 (Annex Q) VDSL2 vectoring acc. to ITU G.993.5 (G.Vector) Compatible with VDSL2 and with Deutsche Telekom's U-R2 connection (1TR112) ADSL2+ over ISDN acc. to ITU G.992.5 Annex B/J with DPBO, ITU G.992.3 and ITU G.992.1 ADSL2+ over POTS acc. to ITU G.992.5 Annex A/M with DPBO, ITU G.992.3 and ITU.G.992.1 Supports only one virtual circuit in ATM (VPI-VCI pair) at a time
WAN (Combo port) SFP / TP	WAN SFP: Slot for small form-factor pluggable Gigabit Ethernet transceiver (mini-GBIC). Compatible with optional LANCOM SFP modules for fiber optic connections. Switched as WAN port at delivery, can be configured as LAN port. WAN TP: 10 / 100 / 1000 Base-TX, Autosensing Full duplex, Auto node hub
ETH	4 individual 10 / 100 / 1000-Mbps Fast Ethernet ports; operate as switch ex-factory. Up to 3 ports can be switched as additional WAN ports.
USB	USB 2.0 Hi-Speed host port for connecting USB printers (USB print server), serial devices (COM-port servers), or USB data media (FAT file system)
Analog 1 / Analog 2	Use the cables from your analog terminals to connect them to the analog interfaces.
ISDN 1 / ISDN 2	Internal (NT) ISDN busses. Use ISDN cables to connect ISDN devices to the ISDN interfaces.
Wi-Fi	2 SMA connectors for the supplied dual-band Wi-Fi antennas; frequency bands: 2400-2483.5 MHz (ISM) and 5150-5725 MHz (country-specific restrictions possible); Radio channels 2.4 GHz: Up to 13 channels, max. 3 non-overlapping (2.4 GHz band); Radio channels 5 GHz: Up to 26 non-overlapping channels (available channels depending on country-specific regulation and associated with automatic, dynamic DFS channel selection)
Configuration interface	Serial USB-C configuration interface
WAN protocols	
Ethernet	PPPoE, Multi-PPPoE, PPTP (PAC or PNS) and IPoE (with or without DHCP)
Package content	
Cables	1 DSL cable for an IP-based line, 4.25 m
Adapters	2 TAE adapters (RJ11 - TAE)
Antennas	2 external 3 dBi dipole dual band antennas
Power adapter	External power adapter

*) The additional power LED statuses are displayed in 5-seconds rotation if the device is configured to be managed by the LANCOM Management Cloud.

This product contains separate open-source software components which are subject to their own licenses, in particular the General Public License (GPL). The license information for the device firmware (LCOS) is available on the device's WEBconfig interface under "Extras > License information". If the respective license demands, the source files for the corresponding software components will be made available on a download server upon request.

Hereby, LANCOM Systems GmbH | Adenauerstrasse 20/B2 | D-52146 Wuersele, declares that this device is in compliance with Directives 2014/30/EU, 2014/53/EU, 2014/35/EU, 2011/65/EU, and Regulation (EC) No. 1907/2006. The full text of the EU Declaration of Conformity is available at the following Internet address: www.lancom-systems.com/doc