



QUICK SETUP GUIDE

FOR

ALLNET POWERLINE ETHERNET ADAPTER

ALL 1685

PREFACE

This document describes the installation of the ALLNET ALL1685 Powerline adapter

TO THE INSTALLER

This publication contains the following sections:

- Important safety instructions
 - The first thing you need to know before you begin to install
 - Product installation guide
 - Specification
-



IMPORTANT SAFETY INSTRUCTIONS

This product is intended for connection to the AC power line. For installation instructions, refer to the installation section. For removing the device, refer to the unplug section. The following precautions should be taken when using this product.

-
- Please read all instructions before installing and operating this product.
 - Please keep all instructions for later reference.
 - Please follow all warnings and instructions marked on the product.
 - **Unplug the AC coupler from the wall outlet before cleaning. Use a damp cloth for cleaning. DO NOT use liquid cleaners or aerosol cleaners.**
 - **DO NOT** operate this product near water.
-
- This product should **never** be placed near or over a radiator, or heat register.
 - This product relies on the building's electrical installation for short-circuit (over current) protection.
 - Ensure that a fuse or circuit breaker **no larger than 120 VAC 20A or 240 VAC 16A** is used on the phase conductors (all current-carrying conductors).
 - **DO NOT** allow anything to rest on the product interconnect cords.
 - **DO NOT** locate this product where people may walk on the cords.
 - Because the ALL1685 PLC Ethernet Bridge product sends data over the powerline, it is recommended that you plug it directly into a power outlet. Do not plug the device into a UPS or power strip with surge protection. The ALL1685 product has its own power filter for protection against surges.
 - The product can be operated at an ambient temperature of 40°C .
 - For pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.
 - **Only** a qualified technician should service this product. Opening or removing covers may result in exposure to dangerous voltage points or other risks.
 - Unplug the Adapter from the wall outlet and refer the product to qualified personnel for the following conditions:
 - When the interconnect cords are damaged or frayed.
 - If liquid has been spilled into the product or if the product has been exposed to rain or water.
 - If the product has been exposed to rain or water.
 - If the product does not operate normally when the operating instructions are followed.
 - If the product exhibits a distinct change in performance.

THE FIRST THING YOU NEED TO KNOW BEFORE YOU BEGIN TO INSTALL...

1. Before installing, make sure your PC meets these requirements for hardware installation:

- Microsoft Windows® 98SE, ME, 2000, XP, Vista, MAC or Linux OS
 - Intel Pentium® 166 MHz processor, equivalent or higher
 - At least one free Ethernet port for the ALLNET ALL1685 Ethernet Powerline Adapter.
-

2. Your PC must not be configured for another network. This means that:

- **No network clients** except for Microsoft Network*, Client for Netware* Networks, or Microsoft Family Logon* are installed
 - **No network services** except file and printer sharing for Microsoft Networks or Personal Web Server* are installed
 - **No network protocols** except Microsoft's TCP/IP, IPX/SPX, NetBEUI, or Net BIOS support for IPX/SPX are installed
-

3. Network installation requires two steps:

1. Install the ALL1685 Powerline Adapter
 2. For each PC to be added to the network, repeat the process
-

4. Check that you have the following parts for each PC on the network:

Product installation guide for ALL1685

1. Hardware ALL1685 Powerline Adapter
2. Ethernet Cable (CAT 5)



5. Familiarize yourself with the ALLNET ALL1685 connections:



6. Limitation of the PLC device:

To meet the safety regulation, the longest distance between powerline carrier devices will be limited at 200 meter and is valid for in-house use only. More than 200 meter will cause signal reduction or data loss.

The devices are meant to be operated on the same electrical phase (same physical cable). If this is not the case in your installation, you may need to install a PLC phase-coupler or take other corrective measures.

More information may be downloaded in the download-section from www.allnet.de.

Product installation guide

Important:

Do not plug the device into a power strip or surge protector because these devices may consist of filter and impair signal. Also avoid plugging the device right next to noisy sources such as cell phone charger, halogen light, Energy saving bulb, noisy desktop computer, vacuum cleaner, etc. Both cases result in poor transmission speed.

To install for the PC local Powerline network

1. Use the supplied Category 5 Ethernet cable to connect the ALL1685 and your PC's Ethernet port.
2. Plug the Ethernet Bridge ALL1685 to outlet.
3. The POWER LED indicator will light on after plugging.
4. You can repeat steps 1 and 2 for connecting the others.
5. The PLC LED indicator starts blinking when the data communication proceeds on Powerline.
6. The ETH LED indicator starts blinking when the data communication proceeds on Ethernet.

To share a xDSL or cable modem with Internet access service

1. Connect one ALL1685 to the broadband router
 - Plug the ALL1685 into an AC outlet.
 - Plug the provided Ethernet cable into the RJ45 connector of the ALL1685 and plug the other end of the cable into an available Ethernet port of the Router.
2. Connect the other ALL1685s to the PC(s) to share the Internet access
 - Plug the Bridge ALL1685 into an AC outlet.
 - Plug the provided Ethernet cable into the RJ45 connector of the bridge ALL1685 and plug the other end of the cable into Ethernet port on the PC.

As wireless AP (Access Point) Extender

1. Connect one Ethernet Bridge ALL1685 to the broadband router
 - Plug the ALL1685 into an AC outlet.
 - Plug the provided Ethernet cable into the RJ45 connector of the Bridge ALL1685 and plug the other end of the cable into an available Ethernet port of the router.
2. Connect the other Ethernet Bridge ALL1685 to the AP
 - Plug the ALL1685 into an AC outlet.
 - Plug the provided Ethernet cable into the RJ45 connector of the bridge ALL1685 and plug the other end of the cable into the Ethernet port on the AP.

Specification

Items	Description	
Line Rate	85Mbps	
Effect Data Rate	Up to 25Mbps effective throughput	
Frequency Band	4.3~20.9 MHz	
Access Methods	CSMA/CA	
Qos	4 Levels	
Modulation	OFDM (QAM 256/64/16, DBPSK, DQPSK)	
Port	One Ethernet port	
Standards	IEEE 802.3, IEEE 802.3U, HomePlug 1.0.1	
Operating System	Microsoft Windows® 98 SE, Me, 2000, XP, Vista, MAC or Linux	
Nodes	Supports up to 15 nodes per network	
Encryption	56 bit DES Link Encryption with key management	
LEDs	PWR, PLC, ETH	
Environment	Temperature	Operating : 0~40℃
		Storage : -20~60℃
	Relative Humidity	Operating : 10~85% Non-Condensing
		Storage : 5~90% Non-Condensing
Power Source	100~240 VAC, 50/60 Hz	
Certification	FCC, CE, HomePlug 1.0.1	

LEDs

PWR	On: Power on Off: Power off
PLC	On: Powerline link detected Blinking: Powerline traffic detected Off: No Powerline link detected
ETH	On: Ethernet link detected Blinking: Ethernet traffic detected Off: No Ethernet link detected



EC --- Declaration of conformity

Germering, April. 30. 2009

For the following equipment:

Powerline Bridge Device

ALL1685 (85 Mbps PLC Ethernet Bridge)



The safety advice in the documentation accompanying the products shall be obeyed. The conformity to the above directive is indicated by the CE sign on the device.

The ALLNET ALL1685 (85 Mbps PLC Ethernet Bridge) conforms to the Council Directives of 2004/108/EC and Low Voltage Directive of 2006/95/EC.

This equipment meets the following conformance standards:

EMI: EN 55022 :2006

EMS: EN 50412-2-1 :2005

IEC 61000-4-2 :1995+A1 :1998+A2 :2000

IEC 61000-4-3 :2006

IEC 61000-4-4 :2004

IEC 61000-4-6 :2007

EN 60950-1:2006

This equipment is intended to be operated in all countries.

This declaration is made by
Allnet GmbH
Maistr. 2 ;
D-82110 Germering
Germany

and can be downloaded from <http://www.allnet.de>